Florida WILDLIFE

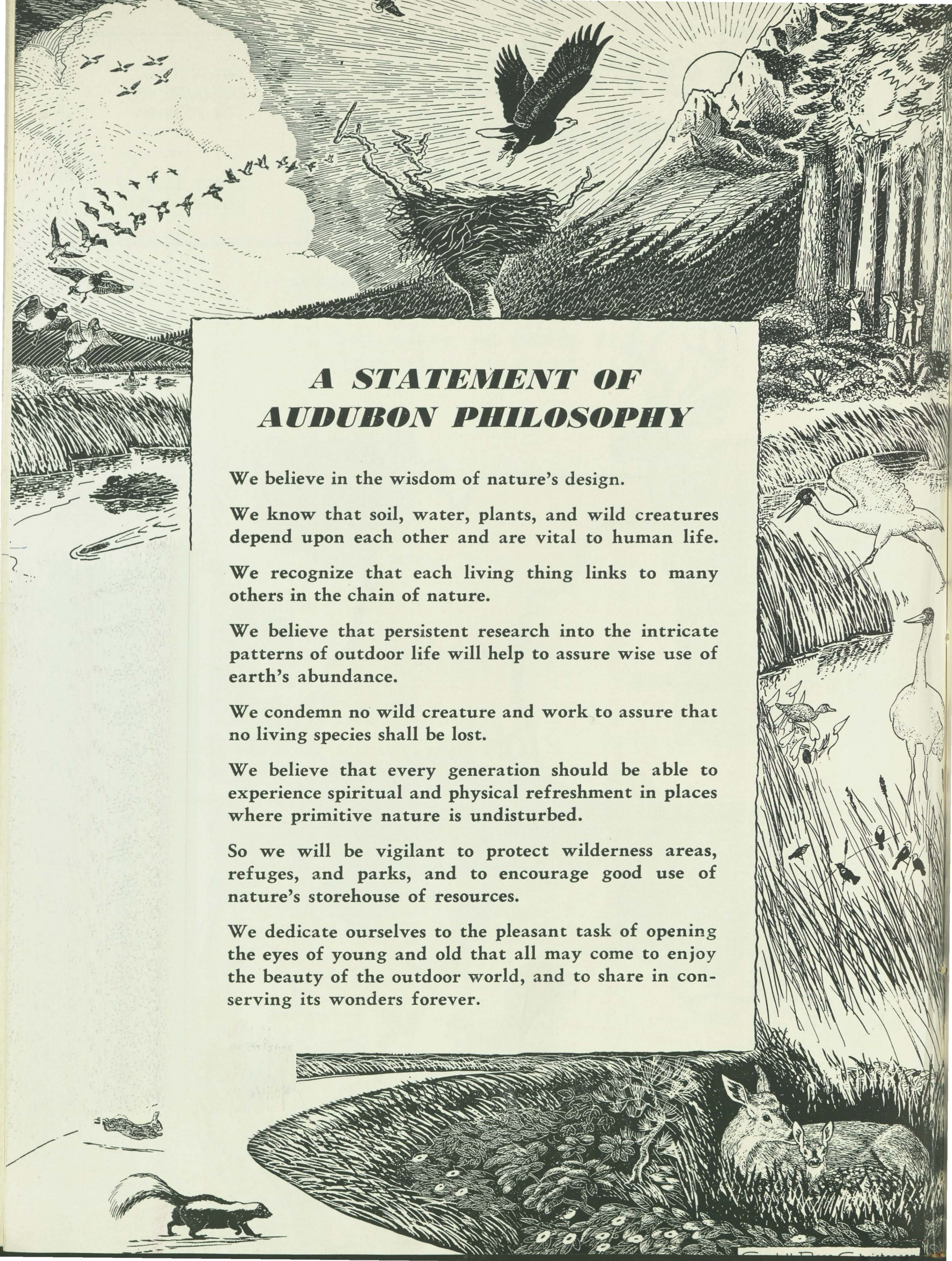
SEPTEMBER, 1955

The Florida Magazine for all Sportsmen

25 CENTS

WATERFOWL MANAGEMENT IN FLORIDA

GHOST BASS OF GOOSE PRAIRIE



A STATEMENT OF AUDUBON PHILOSOPHY

We believe in the wisdom of nature's design.

We know that soil, water, plants, and wild creatures depend upon each other and are vital to human life.

We recognize that each living thing links to many others in the chain of nature.

We believe that persistent research into the intricate patterns of outdoor life will help to assure wise use of earth's abundance.

We condemn no wild creature and work to assure that no living species shall be lost.

We believe that every generation should be able to experience spiritual and physical refreshment in places where primitive nature is undisturbed.

So we will be vigilant to protect wilderness areas, refuges, and parks, and to encourage good use of nature's storehouse of resources.

We dedicate ourselves to the pleasant task of opening the eyes of young and old that all may come to enjoy the beauty of the outdoor world, and to share in conserving its wonders forever.

Florida WILDLIFE

VOL. 9, NO. 4

SEPTEMBER, 1955

★

Published monthly by the
FLORIDA GAME AND FRESH WATER FISH COMMISSION
Tallahassee, Florida

★

**Dedicated to the
Conservation, Restoration, Protection of Our Game and Fish**

★

BILL HANSEN, Editor
MORRIE NAGGIAR, Associate Editor
C. L. SATTERFIELD, Circulation
M. L. NORWOOD, Editorial Assistant

In this Issue

Waterfowl Management in Florida .... John Sincock 8

Ajax, Florida .... Plato Winder 11

Ghost Bass of Goose Prairie .... Sarah Alberson 12

Walk-'em-up Rail Hunt 14

Florida's Wildlife Management Areas 16

Check That Outboard .... Edmund McLaurin 22

Fish Conservation Fundamentals .... R. W. Eschmeyer 24

Around The State 26

Poncho—Maid of All Work .... Paul MacAlester 28

Farming and Fishing 30

The Final Hunt .... Joe L. Cobb 31

Departments

JUNIOR CONSERVATIONIST 5

KNOW YOUR WILDLIFE 6

MUZZLE FLASHES 32

FISHING 35

FEDERATION NOTES 37

MEET YOUR COMMISSION 38

TESTS & TELLS 40

FLORIDA BIRDLIFE 42

Florida Wildlife is published monthly by the Florida Game and Fresh Water Fish Commission, Tallahassee, Fla. Single copy, 25c; subscription rate, $2.00 per year. Changes of address should be reported promptly. For advertising rates address: The Editor. Unsolicited pictures and editorial material will be handled with care, but Florida Wildlife cannot assume any responsibility for loss or damage of same. Permission to reprint any material in this publication will be granted to responsible parties upon application to the editor. Entered as Second Class Matter Nov. 8, 1947, at the Post Office at Tallahassee, Fla., under the Act of Aug. 24, 1912.

Copyright 1955, by
Florida Game and Fresh Water Fish Commission

ROSE TALLAHASSEE

HUNTERS

OPEN SEASON ON MARSH HENS (RAILS) AND GALLINULES: September 10 through November 8.

BAG AND POSSESSION LIMITS; Rails (except Sora) and Gallinules: 10 per day, 20 in possession. Sora rail, 25 per day, 25 in possession.

During May and June of this year, excessively high tides in the important rail nesting marshes of New Jersey and Virginia caused high mortality, especially of the clapper rail, our most important "marsh hen." Renesting undoubtedly helped recover some of this loss but at the time regulations were set, it was not known to what extent. For this reason, the U.S. Fish and Wildlife Service, the final authority on setting migratory bird regulations decided to cut the season 10 days from that of the previous year to allow a margin of safety in view of nesting ground losses.

The October and November issues of Florida Wildlife will carry a complete summary of hunting regulations for the 1955-56 season.

COMMISSIONERS

FORACE HOLLAND, Chairman
Panama City

TALMADGE HART
Wauchula

GORDON GRANGER
Lake City

B. BRACK CANTRELL
Okeechobee

DON SOUTHWELL
Ormond Beach

★

ADMINISTRATIVE STAFF

A. B. ALDRICH, Director

O. EARLE FRYE, Assistant Director

JOEL McKINNON
Administrative Assistant

DON R. LUETHY
Chief, Fish Management Division

E. B. CHAMBERLAIN, JR.
Federal Aid Wildlife Coordinator

ROBERT A. DAHNE
Information-Education Coordinator

★

REGIONAL OFFICERS

Northwest Region
JAMES BICKERSTAFF, Regional Manager
202 East 4th Street, Sunset 5-5352
Panama City, Florida

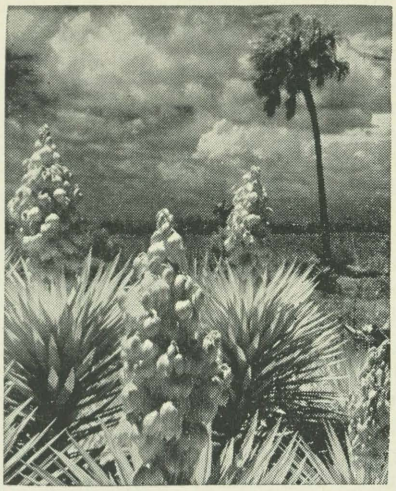
Northeast Region
CHARLES CLYMORE, Regional Manager
Box 908, Phone 1725
Lake City, Florida

Central Region
DAVID SWINDELL, Regional Manager
Phone 8-3621
Williston, Florida

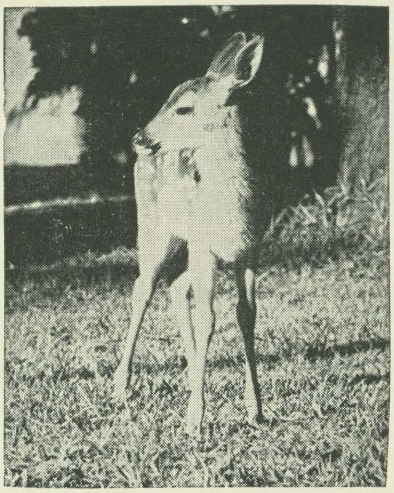
Southern Region
E. T. HEINEN, Regional Manager
Lodwick Airport, Mutual 6-5171
P. O. Box 1392
Lakeland, Florida

Everglades Region
FRED W. STANBERRY, Regional Manager
P. O. Box 877, Telephone 2-2851
Okeechobee, Florida

Florida Wildlife's Junior Wildlife PHOTO CONTEST



PLANTS

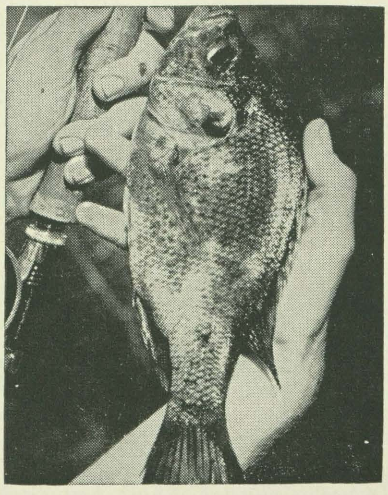


ANIMALS

RULES

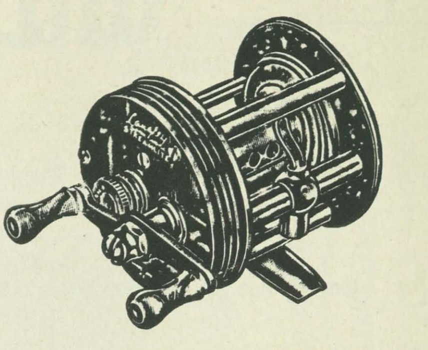
1. The Junior Wildlife Photo Contest ends at midnight September 15, 1955.
2. Contestants must be between the ages of 10 and 18 inclusive.
3. All photographs must be taken within the State of Florida.
4. All photos must be mailed first class mail to Florida Wildlife, Tallahassee, Florida, by midnight of September 15, 1955.
5. Contestants may submit as many photos as they desire.
6. Photos must be at least 4 inches by five inches in size and no larger than 11 inches by 14 inches.
7. The following information must be printed or typed on a piece of paper and pasted on the back of each photograph: (Do not write on photos.) (a) Name of camera used (b) type of film used (c) exposure used (d) location where picture was taken (e) your name, address, and age. This information must appear on the back of every photograph submitted.
8. All prize winning photographs become the property of Florida Wildlife.
9. No photographs will be returned unless self addressed, stamped envelope is enclosed with entry.

BIRDS

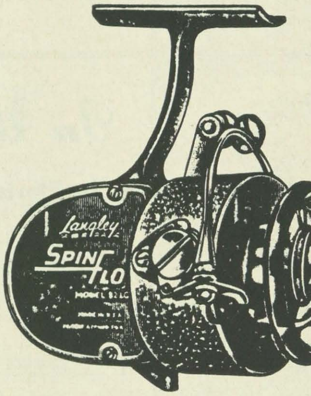


FISH

PRIZES



3 LANGLEY STREAMLITE REELS



3 LANGLEY SPINFLO REELS

PLYFLEX Casting Rods

SOUTH BEND Casting Reels

GLADDING Spinning Lines

GLADDING Casting Lines

MY BUDDY Tackle Box

AUBURN Fish Hook Assortments

REDHEAD Gun Case

LUCKY 7 Tackle Assortments

PORTER BAITS — Assorted

PERMA Gun Finishes — Assorted

FLOWERING FLOREOS — Assorted

KINGFISH Assorted Lures

CLARKSPOONS

G. F. Tackle Kit

TRUE-TO-LIFE Books
complete set

THE FISHERMAN MAGAZINE
(2 one-year subscriptions)

FISHERMAN'S HANDBOOK—3

FLORIDA WILDLIFE MAGAZINE
(2 one-year subscriptions)

DIAMOND JIM Lures—Assorted

OLD ENGLISH FLASH MINNOWS
—Assorted

SHELL-O-MATIC Cartridge
Dispensers (2)

SQUACKY Squirrel Call

JUNIOR CONSERVATIONIST

By DENVER STE. CLAIRE

SAYING HELLO to all of you from the Camp at Lake Eaton. By this time you are getting ready for school and camp is but a memory. I do hope though that the memories of your encampment this year at Lake Eaton are pleasant and the kind that you will always want to remember.

Your writer is preparing this copy while camp is still in session and of course this is a very special week with us for it is the first camping week scheduled for girls. Looking out the window I can see 36 young ladies enjoying a wonderful time down on the Lake. Yes, sir! Thirty-six young ladies from all over the state. And they have arrived from Miami all the way to Panama City.

Two women counselors from the University of Florida are engaged in seeing they enjoy themselves and learn something of our natural resources. The senior counselors are Miss Ann Wallis and Miss Virginia Newsome, both of Ocala.

Enrollment for our sixth week: Nikki Bobert, Patsy Branch, Penny Branch, Claudia Brewster, Lana Bryan, Judith Campbell, Linda Gay Clark, Jeannie Dequine, Dorothy Forsyth, Gail Forsyth, Patricia Forsyth, Ann Fortner, Charlotte Green, Sandra Sue Gilmore, Judy Granda, Reba Hall, Hilda Jean Hunter, Dina Iannetti, Sandy Iannetti, Carrie Jackson, Lane Jackson, Rita Jones, Diana Myers, Ruth Pardue, Sue Perry, Diane Relyea, Janis Relyea, Pat Relyea, Carol Jean Rowell, Joyce Lynn Rumph, Natalie Schasman, Linda Shoenberger, Jean Maria Skinner, Betty Jean Smiltz, Mable Suzzane Smith, and Paula Gene Smith.

Junior counselors for the week are five young ladies who are members of the only all-girls club in the state—the Bay County Girls Conservation Club. They are Misses Charlene Pledger, Cathlyn McClain, Donna Hazen, Betty Guy Cooper, and Annete Howard.

Last week was another very special occasion for all of the League members. It was our 4th Annual Conference Week. Delegates from the various chartered clubs within the league and from all over the state participated in the general assembly to hear reports given from the out-going officers and to meet to elect officers for the coming year.

Out-going officers for the term of 1954-55 are: Charles Scruggs, Jr., president, Tampa; Walter Krueger, vice president, Leesburg; Cathlyn McClain, secretary, Panama City; Johnny Coleman, treasurer, Wildwood; directors: Lynn Ward and Colin McLauglin, Miami, and Charlene Pledger, Panama City.

This was the first year that the entire week was dedicated to conference and nothing else.

All delegates registered on their arrival with the secretary, and candidates registered on Monday for their respective officers. The outgoing board of directors appointed a nomination committee. The board was presided over by the vice chairman, Walter Krueger and Thursday was decided as election day for state officers within the league.

Monday through Friday during the week July 18-22 found many meetings of the delegates and the newly created board of directors.

New officers for the year 1955-56 are as follows: Phil Alexander, president, Miami; Earl Powell, vice president, Miami; Charlene Pledger, secretary, Panama City; Cathlyn McClain, treasurer, Panama City; directors: Jerry Hill, Ocala, Walter Krueger, Leesburg, and Mike Davis, Hialeah.

The new president appointed the following committees:

Budget and Finance Committee—Chairman, Cathlyn McClain, Panama City; Tom Cheek, Pensacola, and Betty Guy Cooper, Panama City.

Summer Activities for 1956 at Lake Eaton—Chairman, Lynn Ward, Miami; Mike Davis, Hialeah, and Tom Mawhinney, Hialeah.

Awards Committee 1956 — Chairman, Walter Krueger, Leesburg; Jerry Hill, Ocala, and Frank McDonald, Leesburg.

Resolutions Committee 1956—Chairman, Lonny Lawrence, Bartow; Duane Witt, Ocala, and Bob Burns, Ocala.

Delegates present for the assembly came from Allapattah, Miami, Leesburg, Eustis, Hialeah, Bartow, Ocala, Panama City, Clearwater, Mt. Dora, St. Petersburg, Bartow, Stuart.

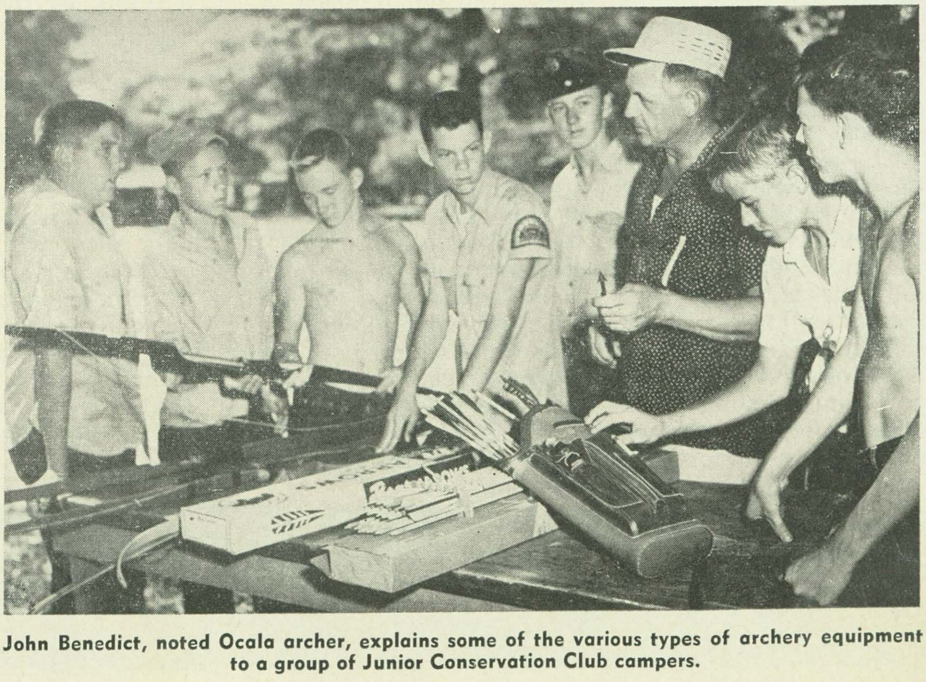
The first board meeting was held July 18 at 1:00 P.M. wherein Vice president Walter Krueger presided in the absence of President Charles Scruggs, Jr., of Tampa.

Schedule of the week was arranged and election day was decided.

July 19, 1955, the meeting of the board convened and sections 3 and 4 of article five were amended by the delegates in general assembly. The office of sergeant-at-arms was discontinued.

On this day the new ritual which has been adopted was discussed and voted on to use as the first installa-

(Continued on Page 34)



John Benedict, noted Ocala archer, explains some of the various types of archery equipment to a group of Junior Conservation Club campers.

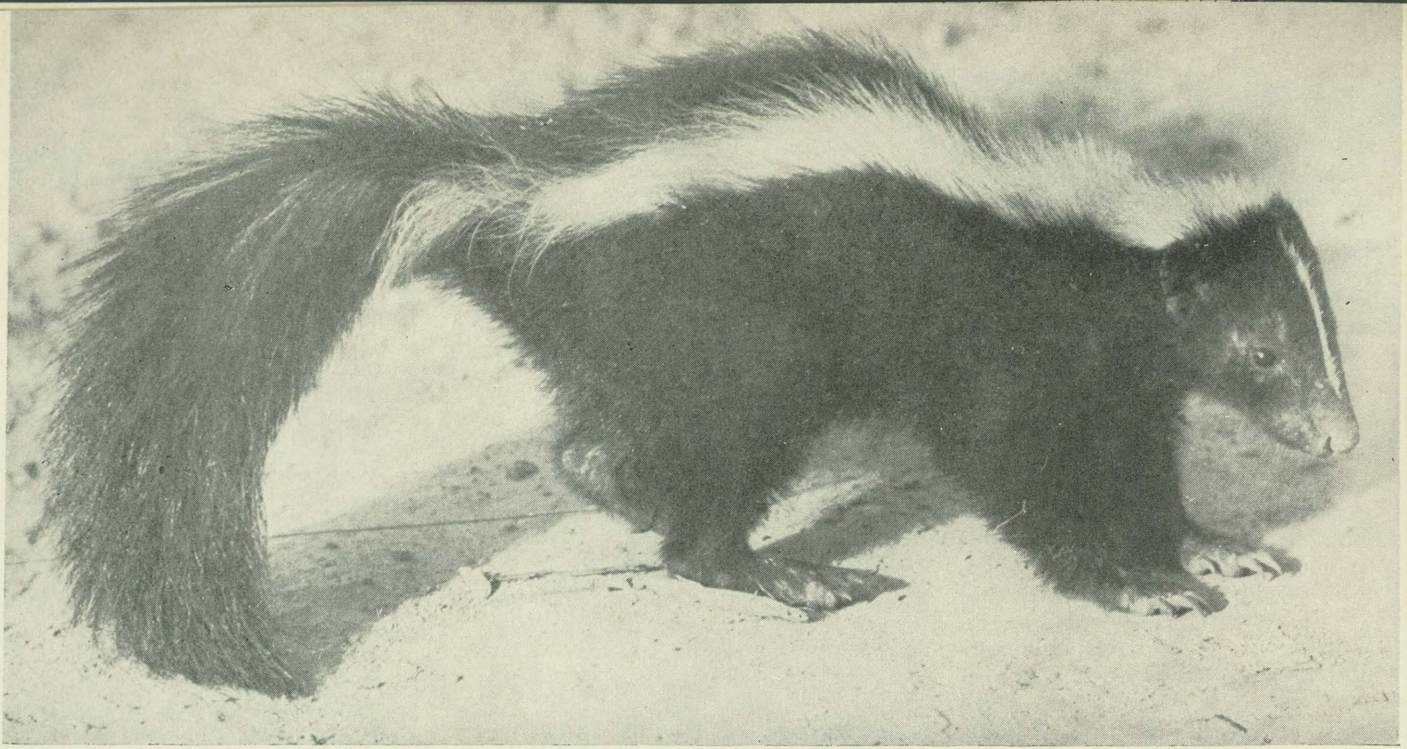


PHOTO BY JOHN H. GERARD

The Striped Skunk

By ROSS ALLEN and WILFRED T. NEILL

Ross Allen's
Reptile Institute
Silver Springs, Florida

IN FLORIDA WILDLIFE for December, 1954, we pointed out that there were two general kinds of skunks in the eastern United States: big striped ones and little spotted ones. The latter, often called polecats or civet cats, have already been discussed. Now let's consider the larger and better known variety.

The common or striped skunk is widespread throughout much of the United States and southern Canada. It is a heavily built animal of medium size, characterized by long black fur and two white stripes running from neck to tail. In some specimens the white stripes are very broad and nearly meet on the midline of the back; in others they are much reduced or even lacking. The tail is long and bushy, generally carried upright. In most Florida skunks the tail is black at the root, but has a conspicuous white brush at the tip. The snout is rather short and blunt, the ears small and rounded. The legs are short, imparting a waddling gait; the claws of the forefeet are large, adapted for digging.

The skunks, both striped and spotted, are famous for the powerful odor they give off when molested. The musk is produced by two small glands just inside the vent, each opening to the surface by a tiny "nozzle." The musk glands will not operate unless the skunk's tail is raised at right angles to the back; if they did, the animal might spray itself. The musk, which is an oily substance, is discharged into the air, where it forms a sort of spreading mist. The odor of this mist is overpowering to many people and some wild animals. It will last for days or weeks, sometimes even months, although no more than a fraction of a drop is discharged at a time. The potent scent suffices to discourage most of the skunk's enemies.

It is well known that a skunk with its tail pinned down cannot spray. One can pick up a striped skunk by the tail and be in no danger, either from the musk or from the bite. (This is not true of the little spotted skunk, however; the smaller species can twist upward and bite the hand that holds it.) Although catching a skunk by the tail is pretty easy, turning it loose again may be a problem!

Skunks may be deodorized by clipping the little nozzles from which the musk is ejected. If the operation is done properly, the openings scar over as they heal, so that spraying is no longer possible. It is also feasible to remove the musk glands entirely, but this is a more elaborate operation and not really necessary. As a matter of fact, captive skunks become tame in a short while, and thereafter do not attempt to spray unless actually hurt or badly frightened. Many pet skunks have never been deodorized properly; their owners put faith in the animals' good disposition.

Striped skunks feed upon all sorts of small creatures, including rats, mice, snakes, lizards, frogs, insects, worms, etc.; as well as acorns, palmetto berries, fruits, mushrooms, and other plants.

(Continued on Page 42)

KNOW YOUR WILDLIFE

FLORIDA'S GAME MANAGEMENT

By A. D. (BOB) ALDRICH, DIRECTOR, GAME & FRESH WATER FISH COMMISSION

IN ORDER THAT the Florida hunter may enjoy continued good hunting in the future, the Game and Fresh Water Fish Commission is required to carry out a long range program on a state-wide basis.

This program comes under the heading of Game Management and includes many projects from the extensive training of key technical personnel to special rules and regulations governing local hunting areas.

As our knowledge of game habits and habitat requirements increases, it is necessary that we continually improve the techniques of game management. The Commission plans a continuous training program for all employees responsible for our game populations and public hunting grounds in order to keep abreast of the ever growing demand for these facilities.

Not only is it necessary for us to put into practice all the known facts about habitat and management but the general public must know and understand the vast game management programs and problems concerned if good hunting is to continue as a way of American Life.

This year there will be 24 wildlife management areas open to public hunting. Supervisory personnel have been working for several years now in order that the game populations native to the respective areas will provide a normal hunting season harvest.

Regulations for each Area are often different. This is due to the fact that some areas can stand more hunting pressure than others. Another important factor to consider is that the public hunting grounds support different species of native animals. Whereas one area might have an abundance of deer and bear, another one will have only small game such as quail, squirrel, and turkey.

It is because of these and many other climatic and geographical differences throughout the state that our Game Management program is an exceedingly difficult task. Each program for each respective area must be planned according to the physical aspects of that locality. END.

"WHY IS THERE A REGULATION AGAINST BAITING?"

THE BAITING OF WATERFOWL, and whether it should be permitted, basically concerns the factors of supply and demand. With the aid of bait, the waterfowl hunter is virtually assured of a bag limit each time he goes afield. If there were sufficient waterfowl in the continental supply to provide several million limits several times each season, there would be no objections to the practice from the standpoint of biology or game management.

However, waterfowl populations are not sufficient to withstand the impact of the greatly increased kill which would be brought about if baiting were permitted nationwide. Ducks and geese are hunted throughout the length and breadth of the North American Continent for a period of 6½ months each year. The season begins on September 1 in Alaska and northern Canada and finally comes to a close on March 10 in the Republic of Mexico. During this 6½-month period, more than 2¾ million hunters exert gun pressure on the birds and, to the best of our knowledge and belief, kill about as many birds as can now be harvested without endangering the resource.

Without doubt, universal baiting, coupled with the present bag limits and season lengths, would restult in a serious over-harvest of the birds. Should the baiting regulation be relaxed, adjustments would have to be made in the regulations to compensate for the increased hunter success. Because of the demonstrated effectiveness of baiting, the adjustments would of necessity be drastic, especially in connection with season lengths and bag limits.

As the result of widespread public demand, the present ban on baiting was first imposed in 1935 to reduce a waterfowl harvest which had reached dangerous proportions in relation to the over-all waterfowl supply. In 1935 the duck hunting fraternity in the United States numbered in the neighborhood of 635,000 persons, as indicated by duck-stamp sales for that year. This past fall, approximately 2,271,000 hunters bought stamps (an increase of over 300 per cent in 20 years).

Although the waterfowl population has grown since 1935, the increase is not in proportion to the marked increase in hunting pressure. This condition was recognized and taken into account by those in attendance at the recent North American Wildlife Conference in Montreal who had the opportunity to discuss the baiting regulation at length in an open meeting. With but one exception, spokesmen for the several State Game Departments, the four Flyway Councils, and independent conservation agencies from every section of the United States, together with Canadian Dominion and Provincial authorities, expressed emphatic opposition to the practice of baiting or any further relaxation of the baiting regulation.

Of significance is the fact that the Canadians have long recognized the undesirable effects of baiting waterfowl in spite of having a great many more ducks per hunter than has this country. In a booklet recently published by the Canadian Wildlife Service, their official attitude is expressed as follows:

"Baiting (attracting birds within range by exposing grain or other food) has been prohibited for many years. Before it was stopped, individuals or groups who were able to carry on the practice killed a disproportionate number of birds in selected localities and, in effect, destroyed the sport for other hunters. With the heavy hunting pressure existing today, baiting, if allowed, would reduce the numbers of waterfowl to a point where waterfowl hunting would be practically wiped out."

Although many of the representatives from the United States attending the conference may have felt as the Canadians do about the ultimate result of baiting, the majority were concerned with the immediate practical aspects of the matter. They knew, as was mentioned before, that the practice of baiting would result in a greater kill, which in turn would have to be compensated for through shorter seasons and smaller bag limits. There is no indication that public sentiment opposing baiting has changed; therefore, it is unlikely that the majority of waterfowl hunters would accept the penalties in hunting opportunity which would have to be imposed if baiting were permitted. END

WATERFOWL MANAGEMENT IN FLORIDA

By JOHN SINCOCK

During recent years, those charged with the responsibility of protecting and managing the nation's waterfowl resources have set out to rectify the comparative scarcity of detailed information regarding waterfowl migration, food, and habitats. Such knowledge, obviously, is vital if our waterfowl populations are to be maintained in the face of ever increasing pressure from the gun and from the loss of habitat through the ever growing agricultural and industrial reclamation of waterfowl lands.

In migration studies, banding is a most valuable tool. In Europe, systematic bird "ringing" was suggested in 1866 and first begun in 1899. Audubon pioneered banding in the United States when he made efforts in that direction as early as 1803, although it was not until 1901 that this country saw any systematic attempts in the field. Twenty years later the Bureau of Biological Survey (later incorporated into the U.S. Fish and Wildlife Service) assumed the control of banding activities. Bird banding grew to become one of the important functions of the Federal wildlife agency, more than five and one-half million birds having been banded by 1949. Of this number, 800,000 or 16 percent were ducks, geese, and coots. By that time, 400,000 band recoveries had been reported, of which 120,000 were from waterfowl. Last summer the Fish and Wildlife Service and several states worked with the Canadian government and succeeded in banding 19,000 ducks. Here in Florida we have, during the past two years, intensified our efforts in banding waterfowl. The past winter, approximately 2,000 birds were handled by our banding crews.

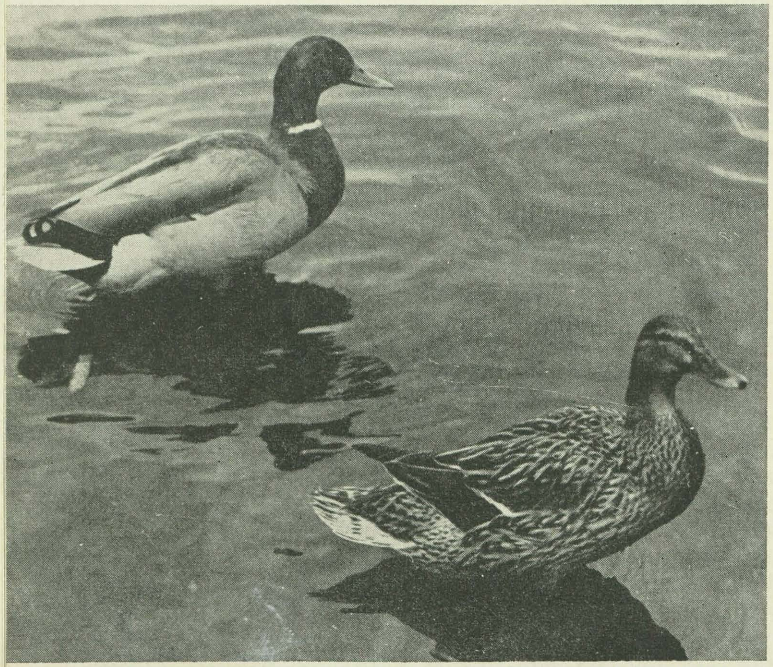


Photo by W. H. Nicholson.

Drake and hen mallard. Distributed around the globe, the mallard is probably the most widely known of the world's waterfowl.

Color marking of waterfowl is a technique which offers interesting possibilities as an aid in determining breeding grounds and migration routes of particular segments of Florida's winter waterfowl concentrations. Biologist Frank Winston preparing to dye a male pintail.

The Game and Fresh Water Fish Commission has attempted several methods of trapping waterfowl. One method that has been successful in securing coots is dipping the birds off the water with a net at night. The technique was reported in the June 1955 issue of Florida Wildlife. With an airboat, two or three men glide into a raft of coots and spot them with headlights so that they can be netted. By this method, up to 100 coots have been caught and banded in one hour.

For trapping ducks, mist nets, cannon traps, and modified shore bird traps have been employed with varying degrees of success. The Figure 8 shore bird trap has been most productive under Florida conditions.

Some band returns are the result of trapping programs conducted in various parts of the country, however, as might be expected, by far the greater number of reports are from birds taken by hunters during the fall and winter waterfowl seasons. It is for this reason that the fall migrational pattern is better known than the northward, spring movement. Available information on the spring migration indicates that the rate of movement and the actual flight paths within the main flyways vary between the two seasons; a fact which is of importance in formulating management plans.

A special technique has been devised for the purpose of increasing the numbers of spring migration records. Frank Winston, in charge of this phase of the waterfowl study in Florida, has developed a dyeing technique for waterfowl. By coloring ducks different hues, we can trace their movements within the state and northward to the breeding grounds. This method, while having its limitations, does supply a means of more rapidly obtaining information on the migratory habits of the birds wintering within the state.

In the spring of 1954, Winston banded and dyed 583 ducks, most of which were blue-winged teal. By July 21, 1954, approximately 40 of the colored ducks had been reported from 12 localities within the United States, the most distant report coming from North Dakota where a dyed blue-winged teal was sighted during July.

This year the commission operated duck traps at Lake Okeechobee, Titusville, and Paines Prairie. Those birds trapped at Okeechobee were dyed red; those from Titusville, yellow; and those from Paines Prairie, green. Reports have started to come in regarding dyed birds seen in other states.

The information obtained from waterfowl banding has led to the recent Flyway concept of waterfowl migration. Banding has indicated that ducks and geese tend to use the same migratory routes year after year. The exact geographical limits of a flyway are not yet, and probably never can be, too precisely defined. In North America there are four great flyways; the Atlantic, Mississippi, Central, and Pacific. There is much overlapping of the flyways in Canada and the limits are certainly not distinctly defined in this country. Partial clarification of migration routes will make possible more realistic setting of seasons for various parts of the country and better enable the authorities to plan waterfowl area restoration and development.

Florida lies within the Atlantic flyway, perhaps the most complicated of the four migration routes. This flyway is a complex maze of sub-routes and tributaries. Further banding is needed to define the location of the Canadian nesting grounds and of the precise pathways followed by the birds.

As an example, a poor nesting season in Labrador and Newfoundland may severely cut the number of black ducks and Canada geese wintering in the Atlantic states as far south as Virginia while not affecting the wintering population of these same species in Florida in the least. By way of explanation, the technicians have learned that the blacks and Canada Geese wintering in Florida originate from breeding grounds located in more interior points.

One interesting tributary of the Atlantic flyway is that used by redhead ducks reared in the Bear River marshes of Great Salt Lake, Utah. These birds, banding records show, migrate eastward to the Atlantic Ocean in the vicinity of Maryland and to the Finger Lakes of New York. This eastward migration of redheads takes place each year despite the fact that this group of birds meet and mingle, at least temporarily, with other redheads that are migrating in a north-south direction.

It is estimated that about 15 percent of the waterfowl in North America used the Atlantic flyway. Florida usually winters about one-half to two-thirds of the flyway's population.

The Fish and Wildlife Service attempts to manage waterfowl on the flyway basis by selecting bag limits and length and time of season based on the status of the birds in each of the four main divisions of the country. Florida does not draw all of its waterfowl from the Atlantic flyway, however. Certain species and segments of the wintering population of other species to be found within the state come from the Mississippi and Central flyways. Much more information is needed to identify these segments in regards to source.

Of the diving ducks, none, except the ringneck, breeds in the eastern part of the continent. Practically all of the canvasback, redheads, and greater and lesser scaup come from the great interior breeding grounds.

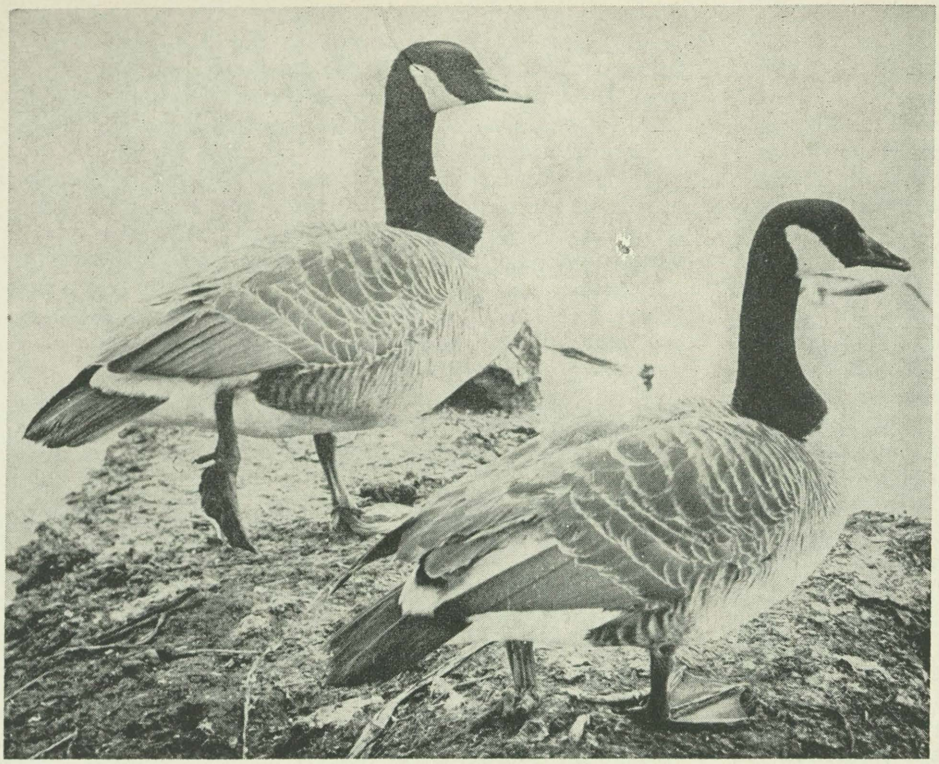
Probably most of our mallards originate from the Great Lakes region as do our black ducks. Most of our gadwall and baldpate come from the Canadian prairie provinces of Manitoba, Saskatchewan, and Alberta, as well as from North Dakota. Pintails breed throughout most of northwestern United States, western Canada, and Alaska and it appears that the birds to be found in Florida come from the eastern part of their principal breeding range. Green-winged teal appear to stick fairly close to the flyway in which they were reared. Those recovered along the Atlantic coast and from Florida have been reared in the maritime provinces of Canada. Most of the Blue-winged teal that arrive in Florida and pass on to the West Indies and South America come from the Great Lakes region and the prairie provinces of Canada.

These are but a few generalized examples of waterfowl migration. One significant fact to be learned from this is that ranges and routes of different groups and species of waterfowl are fairly distinct, and if a certain segment of the population were wiped out, it would be many years before that segment would be replaced by birds from adjacent areas.

Records of longevity and average life span of our waterfowl have been obtained by band recovery. Generally speaking, an old age for ducks would be approximately 20 years, and for geese, 30 years. However, very few birds in the wild can be expected to attain these maximum ages. Approximately between 50 and 70 percent of the ducks that head south in the fall fail to return to the nesting grounds. Almost one-fourth of the birds that do return to the nesting grounds have

(Continued on Next Page)

Shovellers and blue-winged teal. Clarification of waterfowl migration routes will make possible more realistic setting of seasons for various parts of the country. Photo by John H. Gerard.



At the present time, the only large concentration of Canada geese within the state winters in the St. Marks area near Tallahassee. Efforts are being made to encourage geese to use other areas along the Gulf Coast.

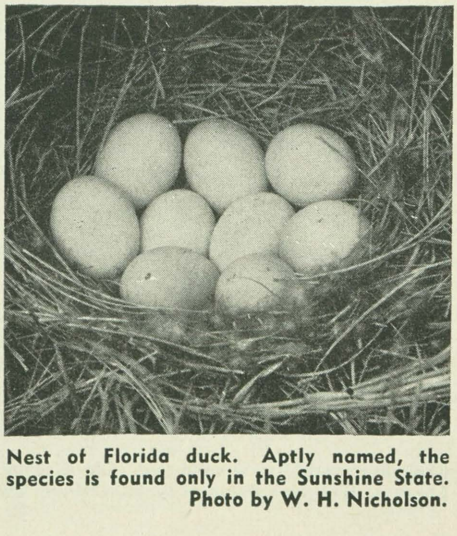
been hit by lead shot. Here is an opportunity for the sportsman to assist in reducing the kill. If retrievers were used more frequently and greater effort made to locate downed birds, the total kill would be reduced at no loss to the sportsmen.

The Migratory Bird Treaty Act implies that hunting may be permitted in accordance with the relative abundance of the birds in different sections of the country. To determine current waterfowl distribution and abundance in North America, a constant watch by both Federal and State game organizations is required. During the year, aerial transects are flown in areas of waterfowl concentrations and estimates are made of numbers sighted. Observations during the summer, on the breeding grounds, contribute valuable information as to the favorability of the breeding season.

Since 1934, the Fish and Wildlife Service and the state game departments, with assistance from interested individuals, have participated in a midwinter inventory. This census is conducted in January. Game personnel distributed throughout the state are asked to make ground counts and estimates of the number and kind of waterfowl seen in certain areas. Aerial surveys are run in vicinities of waterfowl concentrations to check upon the ground counts and to enumerate birds in areas inaccessible from the ground. In addition to the checks conducted in the United States, counts are also run in Central America and Cuba.

Based upon the information obtained from the midwinter inventory, the breeding ground census, and the aerial transects, regulations are proposed by the Fish and Wildlife Service. The Federal agency and states within the particular flyway are organized into what is termed a flyway council. The primary function of the council is to coordinate waterfowl activities within each area. At meetings of the council, regulations pertaining to waterfowl are discussed, followed by recommendations which are presented to authorities for action.

Aerial counts are conducted in Florida on a bi-weekly basis from October to April. Aerial survey routes are located over the Lake Okeechobee marshes, the Kissimmee River valley, the St. Johns River valley, Indian River, and Merritt Island. Additional flights have been made off-shore on the west coast from Bayport to Steinhatchee. The data thus obtained has supplied valuable information on waterfowl populations and habitat utilization.



Nest of Florida duck. Aptly named, the species is found only in the Sunshine State. Photo by W. H. Nicholson.

Florida is unique in having a duck that is confined to the state. Aptly named the Florida duck, the species never leaves the state. The northern boundary of its range is somewhere near Gainesville. This large duck averages about 2½ pounds in weight and, although lighter in color, quite closely resembles the black duck. Each season, before the hordes of waterfowl move down from the north to confuse the issue, the Commission conducts a Florida duck census in several representative areas. The calculations thus derived indicate that the population of this unique species is normally between 32,000 and 44,000. Recent census figures show an upward trend in Florida duck populations.

There are several management techniques that are applicable to Florida conditions, however each must be modified to suit the individual area. The state has an abundance of water in the form of lakes and streams but a great percentage of these are unsuitable for waterfowl. Two important reasons for this are the lack of good waterfowl food plants and the abundance of pest plants. Improvement of a habitat does not necessarily consist of the removal of the "pest" plants and replacing with food plants. Such a course may not be economically feasible because the waters may not be suitable for waterfowl food production.

The management of a given waterfowl area cannot be governed by rigidly set rules for the reason that each has problems and obstacles peculiar to it. Before management plans can be formulated, it is necessary to examine the area in question in order to obtain some idea of its potentials.

There are two techniques, however, which are of general application. Where water control structures exist, it is often desirable to draw down the water level in the summer and to disc the exposed land to encourage the growth of such valuable food plant as smartweed and millet. Under good conditions both plants produce a heavy

(Continued on Page 38)

Ajax, Florida

By PLATO WINDER

Ajax, Florida

Dear Mister Editor:

Charlie Fitts came into Ajax recently and was bent on doing some fishing just like he used to when he lived here. Trouble was, all of his old cronies were busy on their own when Charlie arrived and this upset his plans somewhat. He hadn't brought any fishing tackle with him figuring that it would be easy to borrow some but when it was evident that all his pals were engrossed with their own activities and that no tackle was available he had to stir his stumps considerably to find any sort of equipment that would do.

Old man Adam Lonsberry, who only fishes on Wednesday afternoons, was suggested to Charlie by someone and he hurried off to the old feed store where Adam spends his days and set in to try to borrow enough gear to take him fishing.

The old man Lonsberry is a little hard of hearing and it took Charlie some time to make it clear what he wanted. Adam finally consented and loaned Charlie a rod, reel and three artificial lures. Now Charlie was planning to hire a paddler and a canoe and make a run down the crystal clear waters of Ajax Run. This Run had been very popular some years before but in the last year or two the fish had gotten wise to the antics and lures of the fishermen and had refused to strike. None of us had been fishing Ajax Run for some time and when old man Adam asked Charlie where he intended fishing, Charlie told him the Ajax Run.

This brought on some talk.

"There's no use going down the Run," says Adam.

"I don't see why not," says Charlie. "That's where I always used to go."

"I know," says Mr. Lonsberry, "and so did all of us but it's no good now; the fish are too wise."

"You mean to tell me," says Charlie, "that nobody fishes the Ajax Run anymore?"

"That's right," says Adam. "There's no use fishing it anymore; nobody's caught a fish there in more'n a year."

Charlie was all for arguing with the old man but there he was standing with this man's fishing gear in his hand and it didn't seem the thing to do to dispute the word of his benefactor. So he said, "Well, I'll try some other place then, if that's the way it is," and he walked out of the store.

As I said before, Charlie's old-time fishing companions were out and gone so he had to pick up a stranger for a boat paddler. This fellow turned out to be a retired librarian who had moved into Ajax while Charlie was away. Soon as the stranger had agreed to go with Charlie they set out for the Ajax Run. Charlie kept mumbling to himself, "I'll show that old codger whether those fish will bite or not."

Well, Mister Editor, Charlie had good luck. The librarian was a first class paddler and Charlie had him hold the canoe in check and to drift very slowly downstream.

He used a surface frog lure, tossed it well ahead of the canoe and retrieved it with short strokes, figuring that any bass could get all the fish he wanted to eat in that transparent water and that frogs wouldn't be too plentiful and might prove particularly delectable.

Charlie was right. By late afternoon he had caught eight bass, two of which went over four pounds. As they tied up the canoe and started homeward, Charlie said to his paddler, "Now here's where I make a fool out of old man Lonsberry. He told me that I'd never catch a solitary fish out of this run, that the fish are educated, and that nobody even tries here any more. Well, I'll show him a thing or two; I'll walk in his store and tell him just how much he knows about bass fishing and where the fish will bite."

The stranger listened to Charlie and then answered him quietly, "Wouldn't you have more fun doing it the other way?"

"What other way; what do you mean?"

"What I was thinking," said the librarian, "was that ninety-nine men out of a hundred would go to Mr. Lonsberry and show him the fish and prove to him just how wrong he is. I thought that maybe you'd have more fun if you told the old gentleman that he was exactly right, that you had disregarded his advice and gone fishing in the Run and hadn't caught a dog-goned fish. After all everybody likes to think he is right and you'll make Mr. Lonsberry feel good and you'll feel even better by proving he is a man of good judgment than if you'd proved he isn't."

Charlie thought about this a long time and finally he raised his head and said, "By golly, you've got something there. That's exactly what I'll do. I'll tell Adam Lonsberry I didn't catch the first consarned bass."

And that's what he did, Mister Editor. Leaving the fish in his car, he returned the borrowed tackle to Adam Lonsberry and told him he had made the mistake of ignoring Adam's advice and that he had come home with an empty creel. The old man said, "Well, Charlie, I told you; you can't say I didn't. Now maybe next time you'll take the advice of someone who knows what he is talking about."

And that's how it is, Mister Editor, that instead of one fellow feeling good over catching some fish, two fellows felt good by one fellow being polite and not rubbing it in. And those of us who know this story have come to believe there is more pleasure in a negative value of this kind than there is in the positive value of proving another man to be wrong.

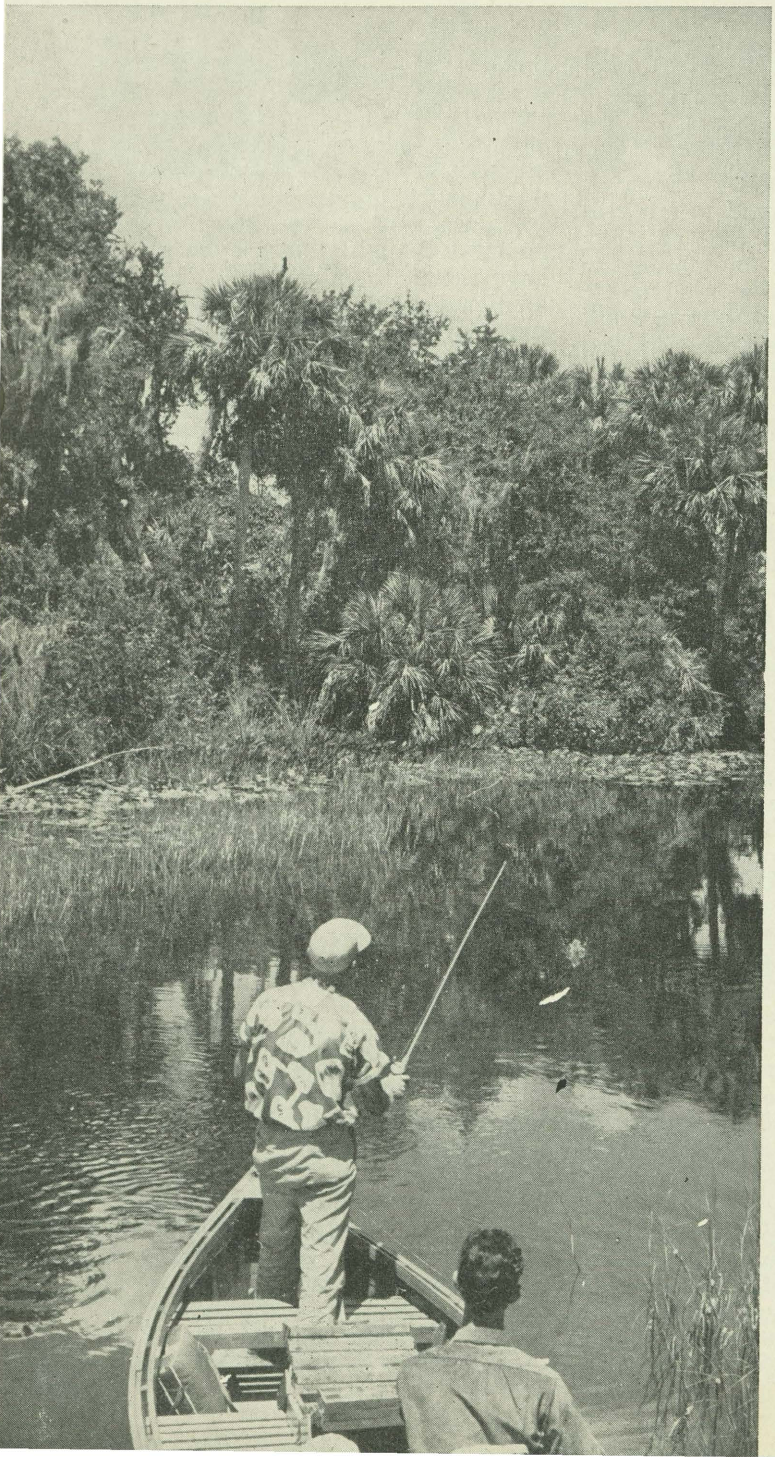
Respectfully,
Plato Winder, Storekeeper

GHOST BASS OF GOOSE PRAIRIE

By **SARAH ALBERSON**

"Wow! Did you see that heavyweight bass?" Jim yelled. "Why didn't someone tell me about this spot before? I'll get that boy if it takes all summer."

Central Florida's lake country is full of bassy-looking waters such as this promising cove being approached by a pair of hopeful anglers.



As my excited brother deftly cast his shiner beneath a dewy lily pad I calmly smiled to myself. The ghost had appeared again and I hated to break the news to him that he'd never get that bass.

Everything was as near perfect as nature could make it . . . an indigo night laced with silver moon-rays sprinkled on the inky waters of Lake Eustis. The air was cooled by an occasional vagabond breeze that softly rustled the palm fronds and pine needles in silhouette against the star-dusted sky. No sound broke the silence except the hoarse croaking of a bullfrog, the crickets night chorus and the occasional crisp plink as our lures hit the water.

"What you just saw is the famous ghost of Goose Prairie. The big illusion. Don't let it worry you, it has happened to all of us at one time or another," Johnny McGough said, squinting in the moonlight as if he hoped to see the ghost again, but knew he wouldn't.

"What I saw was no ghost. It was a real live and I mean ALIVE largemouth black bass which I intend to reel in pronto!" Jim answered in a most confident tone of voice.

I knew Johnny had tongue in cheek because he is a fisherman extraordinary, born and raised in Eustis and knows the lakes and rivers like his ABC's.

Hap and I were in a companion boat and I gave his shin a gentle nudge to keep him quiet about the ghost, as my brother, Jim Dillingham of Atlanta, was visiting us and had the worse case of bass fever I ever saw. I didn't want to dash his enthusiasm. As long as he was after the big ghost bass his anticipation and fishing thrills would last.

Yesterday we fished near Walker's Cove on the north side of Lake Eustis, going out from Harry Ferran's dock, and that is where the bass bug bit Jim. We had left our lakeside cottage early and were out in our boats on the deep blue lake as the tangerine sun heralded the new day. I remember how we admired the gold filtered through the palm fronds and the dark green leaves of the magnolias on the shore. We laughed at a stern old Anhingas (water turkey) drying his wings on a cypress stump while coots skittered over the water in front of our boat. We anchored near shore in a sheltered cove and Jim nonchalantly cast in the bonnets. Almost at once a hungry bass took a liking to his silver spoon and pork-rind, investigated a bit, then took it. Jim let the fish run out for a distance and on the second run he set his hook . . . that was when Mr. Bass did some fancy dancing. In the water and out again.

"Man! What a fish!" Jim exclaimed, beads of perspiration sparkling on his forehead. "Watch that rascal jump." In retrieving he made the mistake of letting his line go slack, and the bass threw the plug right back at him, heading out for far horizons.

Jim was disappointed but undaunted. The bass fishing bug had hooked him . . . but good. He set his jaw in a determined line and watched Johnny as he expertly cast the kicking frog on his hook into shallow water at the shoreline. Then he slowly pulled the frog from the bottom, over the ledge to the deep water drop-off and let it sink. He reeled in very slowly, jerking the rod at intervals to give the frog natural action. Then a largemouth struck and we thrilled to the ensuing fight. Johnny kept his line taut and gave us a lesson in retrieving, slow and easy.

"This is the best way to net a fish", he explained, placing the ample net over the head of the bass. "If you put the fish in tail first with his head sticking out and tail against the rim it may have enough slack and energy to get away." Johnny carefully removed the hook from the mouth of the five pounder and placed it in his creel which was lined with a sheet of aluminum foil. This is a neat trick in hot weather to insulate fish against the heat and keep them fresh.

After several false alarms Jim was successful in bringing in a little palm sized bass and several nice fat bluegills. By that time old Sol was sending down heat rays and we decided to call it a day, promising Jim a real treat of night fishing since it was full moon.

So now we were out on Lake Eustis again and Jim had seen the silvery phantom that makes old men out of boys. There wasn't a chance in a million of his matching the mirage with a real live bass, but the place was inviting and certainly would produce other bass along the shoreline and in the bonnets. Johnny finally told the ghost story which we knew Jim took with a grain of salt.

"No man sees the phantom but once," Johnny said with finality, slowly reeling in his cork and feather popper. "Late in the evening and at night at this same spot where the two cypress trees make an arch at the mouth of Goose Prairie, all fishermen see the apparition, then it's over except the fisherman's fever to bring in the fish that isn't there. It is a pretty exasperating experience."

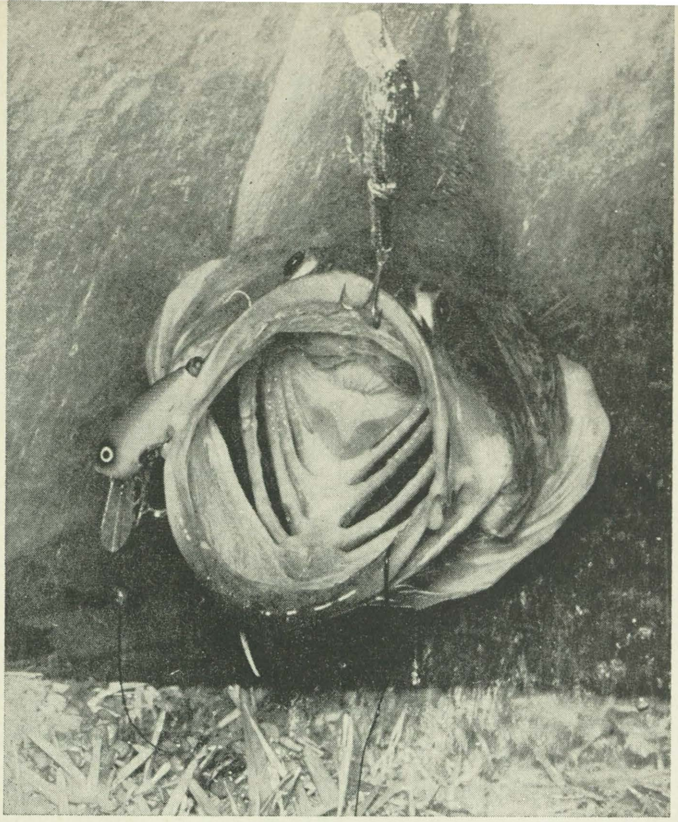
Jim just gave a grunt in reply which meant he'd never give up trying. I was admiring a colony of white herons roosting in the tops of cypress skeletons on the shore when sudden activity in our boat brought me back to attention. Hap was battling a real fighter and I gave him moral support as he won the fight and boated a nice 2½-3 lb. bass. Things were picking up and I tried my luck near the lily pads and cypress knees but it was all bad, as my line got twisted around one of the knees and I lost my favorite Dalton Special lure.

"King bass is unpredictable," Johnny was explaining. "You can take him on a casting road, fly rod, spinning tackle and even a cracker pole and line. I always say you can get bass if you cast your lure in a good place and make it appear tempting and natural, but you've got to go slow on retrieving. That's where so many folks make a mistake . . . in too big a hurry. Bass are curious critters. What's my favorite tackle? Well, I use light tackle . . . a rod about 8½ ft. long weighing about 4½ ozs. I also like a forward tapered line which puts the strength where it should be, near the fish. I prefer surface lures, as you can see." Johnny reached in his tackle box and brought out several fancy bass bugs, which glittered in the moonlight.

Jim decided to swap his silver spoon for a feathery black and white bass bug. Just at that minute a flash of dynamite split the water. It was the biggest bass I ever saw. The fish deftly snapped up a caterpillar that fell from the trunk of an overhanging bay willow.

"That's it—the same old Granddaddy bass. Do you call that an illusion?" Jim excitedly asked.

We were all bug-eyed at what we saw. Could this be the ghost? It certainly looked like it. Surely there couldn't be two such monsters in the same lake.



Scary enough to pass as a ghost, this big boy turned out to be very much alive. He still roams the waters of Goose Prairie in Lake Eustis.

Jim cleverly aimed his popping bug at the trunk of the willow, letting it hit and fall off naturally in the water. He didn't pop it at once, but let it lay quietly then gave it a gentle twitch, just before all pandemonium broke out, as the big giant grabbed the bug and met his waterloo.

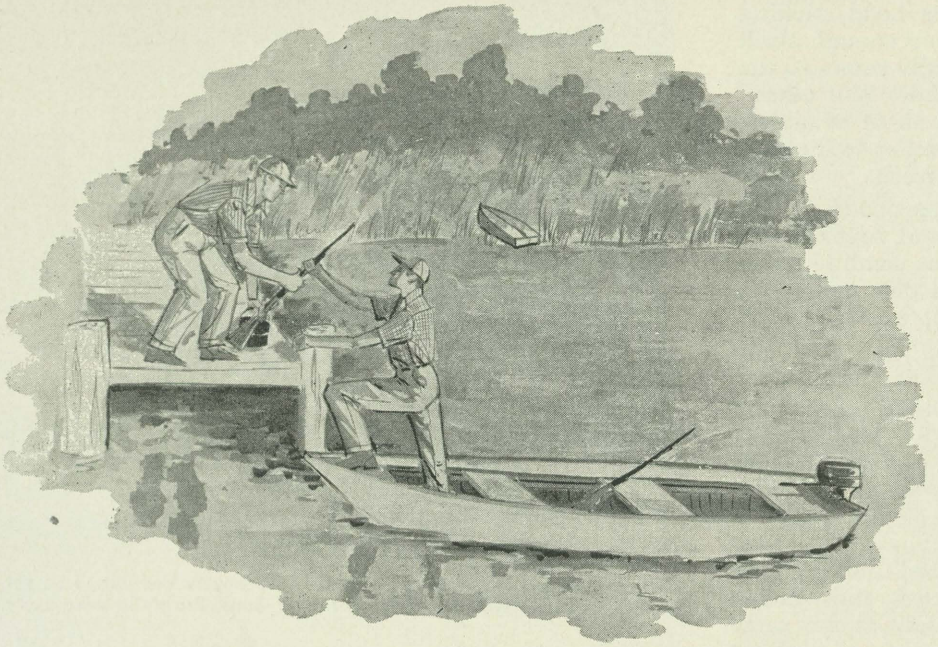
"That was a clever cast," Hap said enviously to this so-called novice fisherman, who was too busy accomplishing an upper half rumba with the bouncing bass to hear him.

What a sight that was . . . the beautiful big fish raising a moon silvered water fall in his frenzied battle for freedom and Jim, a sun bronzed athlete holding his own in a challenge tougher than any obstacle course. The gallant old bass fought a good fight, but finally knew when he was licked and Jim reeled in cautiously, leading the giant up to the boat. He refused the net Johnny handed him and grabbed the bass by the lower jaw, bending it gently downward to make sure the fish didn't get away. He held the beauty up for us to see and Hap's flashlight beam played up and down the glistening scales of the bass. We thrilled at its size and beauty.

"Wait until the boys see it," Johnny said. "That tall tale is squashed now once and for all. Jim, you'll be a real hero."

"No-o-o, the boys will never hear of this feat," Jim shook his head, binding us to secrecy, as he gently removed the hook from the 17-18 pounder's mouth. He placed it lovingly back in the dark water and for a minute it looked as if the bass would sink to the bottom, then in a flash the silver torpedo took on new life and streaked across the lake to live another day and thrill other fishermen who will tell their children and grandchildren the unbelievable story of the Ghost of Goose Prairie. END

WALK—'EM—UP RAIL HUNT

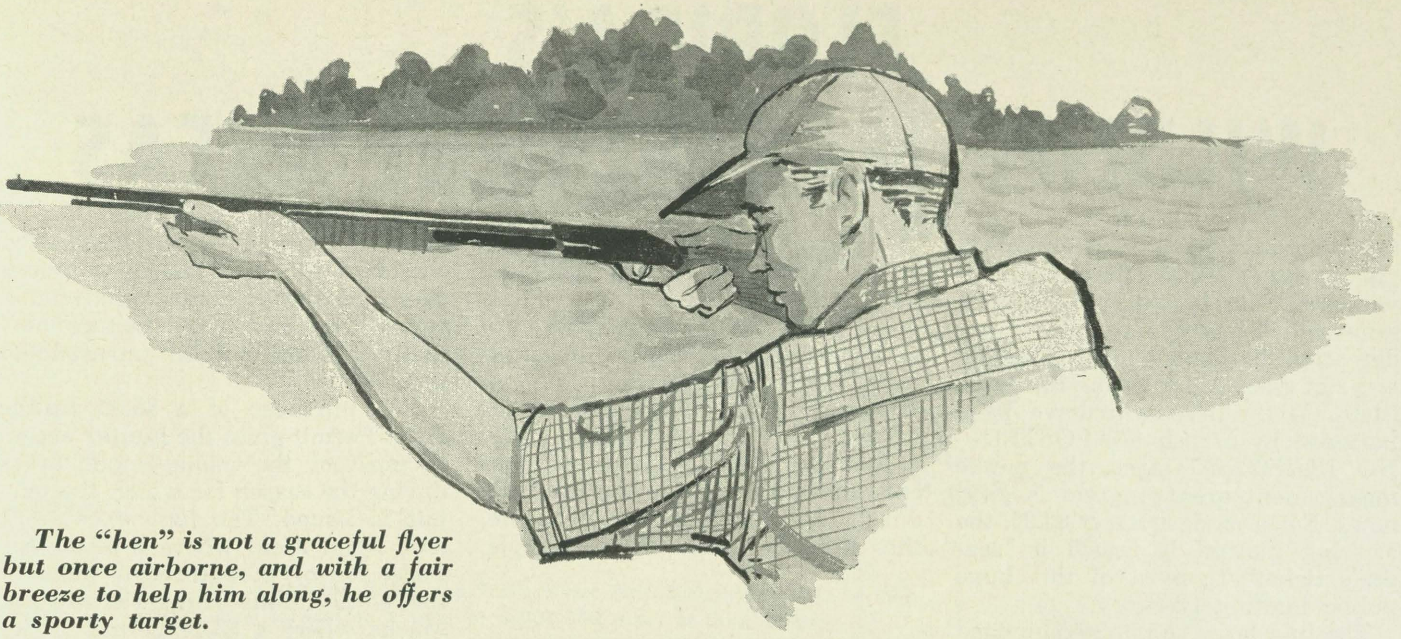


September 9th—First day of the marsh hen season and we're a couple of hundred miles from the old railbird grounds along the Atlantic coastal marshes of Duval, Nassau, and St. Johns Counties. Not that marsh hens are scarce along the Gulf Coast but it is rarely that tides are high enough to flood the marsh sufficiently to give the hunter a chance to jump the birds; or so the local experts told us.

We decided to load up the boat anyway and take a run out to one of the small keys off Carrabelle in Franklin County to see if we couldn't stir up something of interest. At least Sambo, the Labrador, would get some good exercise.

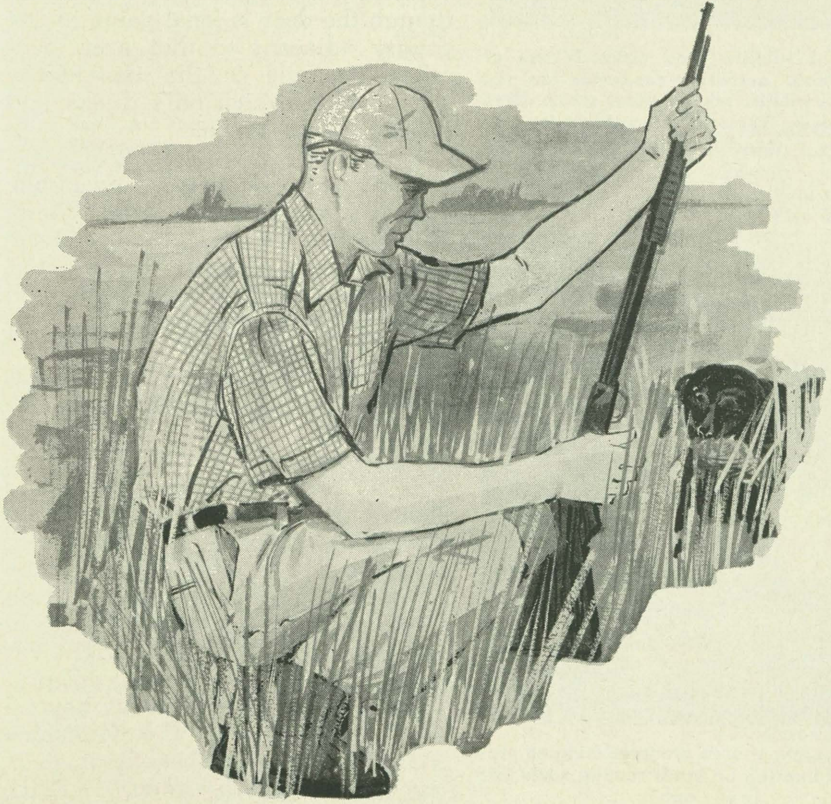
Once on the island, we had to admit it looked mighty "raily." We hit it on a low tide, however, and for that reason prospects seemed none too bright. Sambo had other ideas and splashed on ahead through mud, water, and salt marsh vegetation. Within a matter of minutes we began to see marsh hens.

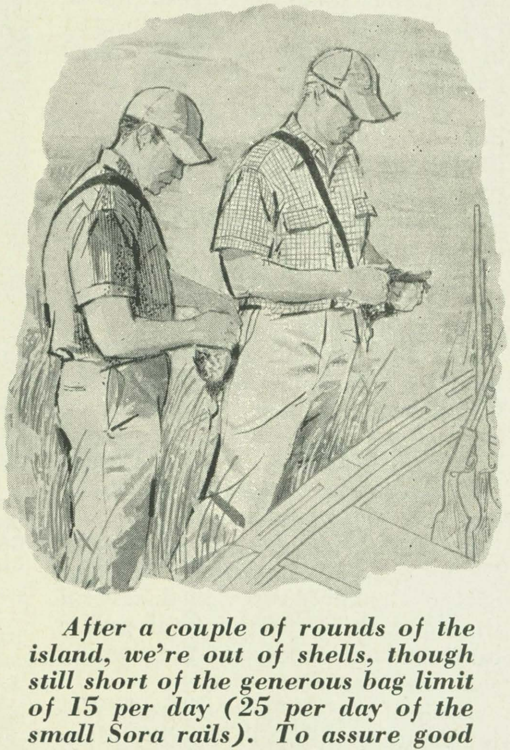
Some of our long held traditions regarding marsh hen shooting went down the drain that morning. Maybe the only way to hunt railbirds in most places is from a poled boat on the high tide but we found shooting aplenty by foot slogging it through the Gulf marshes at low tide.



The "hen" is not a graceful flyer but once airborne, and with a fair breeze to help him along, he offers a sporty target.

A retriever will earn his keep and more by recovering cripples and locating dead birds that fall in the heavy cover. He also forces the birds to take wing rather than skulking off through the grass which is the usual "modus operandi" of the rail tribe.





After a couple of rounds of the island, we're out of shells, though still short of the generous bag limit of 15 per day (25 per day of the small Sora rails). To assure good eating, we clean the birds in the marsh before heading in.

It may not be the conventional method of marsh hen hunting but for our section of the Gulf coast we're sold on this business of a walk-'em-up railbird hunt.

FLORIDA'S WILDLIFE MANAGEMENT AREAS

The year 1941 was an important one to Florida's nimrods for it witnessed the launching of a program which has, to date, placed under scientific management 3,743,250 acres of game lands in the Sunshine State. To hunters who have been harassed by a rash of "POSTED—NO HUNTING" signs, the public management area program is good news. For a modest fee of $5.00, the aspiring nimrod is issued a "season's ticket" to most of this huge public hunting territory.

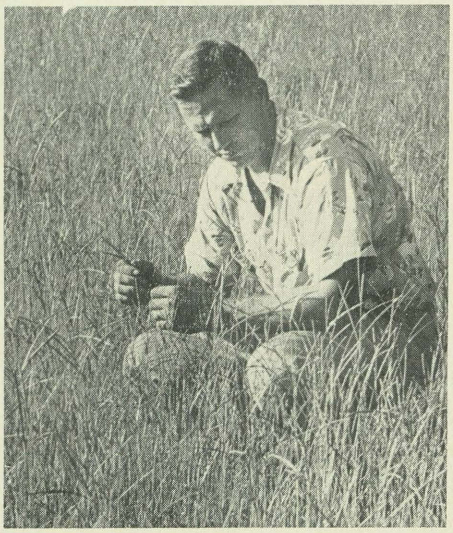
The first large Commission-owned tract of land to receive the attention of the Game and Fresh Water Fish Commission was that located in Charlotte County. Managed as a game refuge from 1941 until 1950, the area was opened as a public hunting ground for the first time during the 1950-51 season. The year previously, the Gulf Hammock area had been opened to hunting, the first of the privately-owned areas to be made available to the public under the Commission's wildlife management area program.

For the 1955-56 season, Florida nimrods will have available 3,002,000 acres of managed lands located throughout the state from Eglin Field in the northwest to the Collier and Everglades Areas at the southern end of the peninsula. Acquisition of the Holopaw, Croom, and Okeechobee Areas plus the opening of the Gaskin Area added several thousand acres to the total public hunting lands open for the coming season.

Each of the Game and Fresh Water Fish Commission's Wildlife Management Areas is under the technical supervision of a Game Division Specialist. Much of the technician's time is devoted to habitat improvement work and other activities designed to bring about optimum game populations.

The extensive encroachment upon game lands within the state is the result of the demands of the increasing population and expansion of industry in Florida. The Commission's Wildlife Management Area program has as its ultimate goal the preservation and management of as much of the state's wildlife habitat as possible. In addition to providing for the present, the program seeks to assure for the future, a good game supply on readily available public hunting lands.

The game management areas are operated essentially as public hunting grounds, however most of them are open throughout the year for fishing, camping, boating, and other recreational uses. No guns or dogs are allowed on the areas except during the hunting season. On some, the Tomoka Area for example, camping is confined to designated sites because of the danger of woods fires resulting from unattended camp fires, and other factors normally connected with unrestricted use.



Planting of wildlife food crops is one of the important activities conducted on the G&FWFC's wildlife management areas. Here Dick Harlow, Tomoka Area biologist examines a stand of Pensacola bahia.

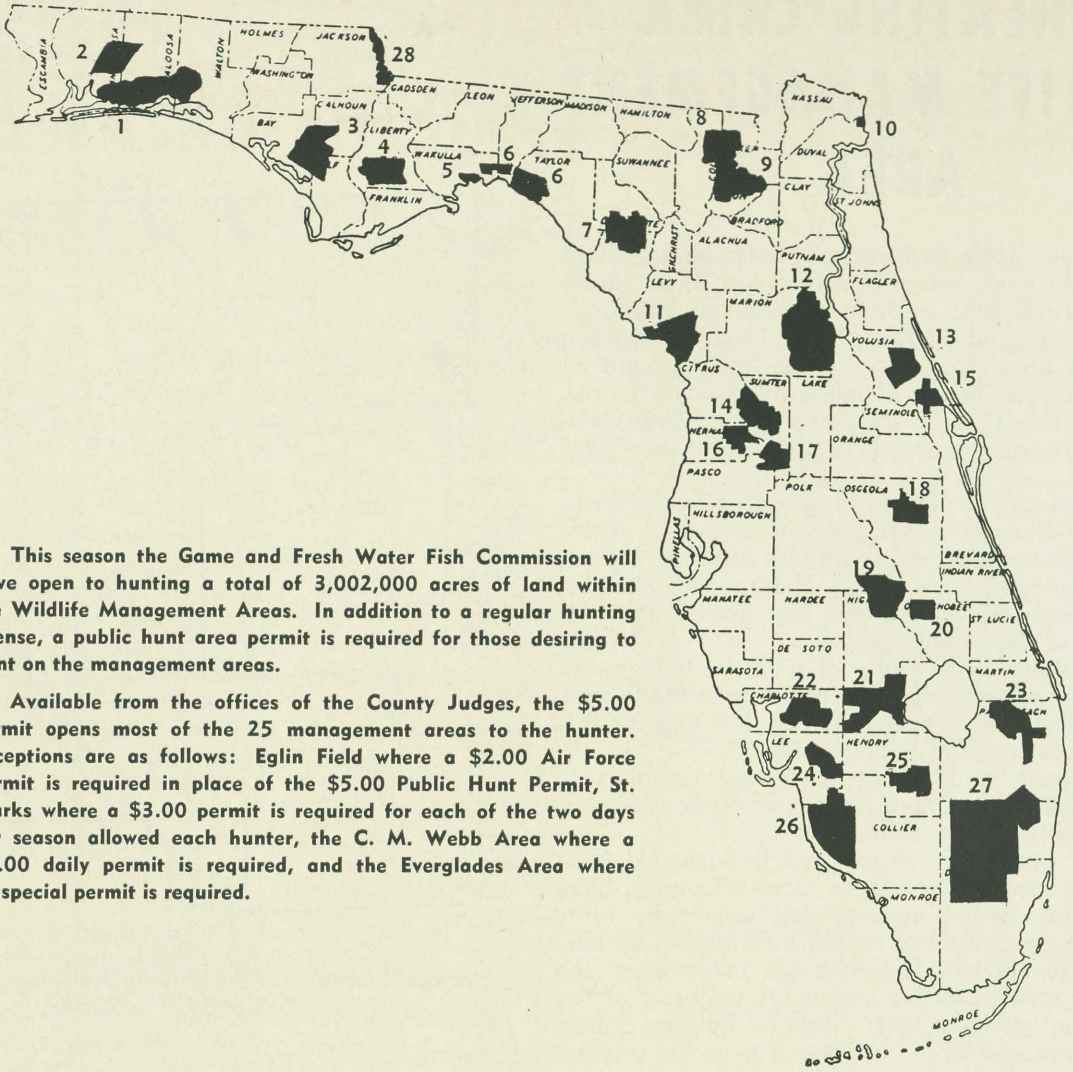
The management area program seeks to provide good hunting on lands readily accessible to the public.

The purchase of a $5.00 Public Hunt Permit gives the hunter access to most of the management areas during the season for which the permit is issued. The four exceptions are; Eglin Field where a $2.00 Air Force Permit is required in place of the $5.00 Public Hunt Permit, St. Marks where a $3.00 permit is required for each of the two days per season allowed each hunter, the C. M. Webb Area where a $5.00 daily permit is required, and the Everglades Area where no special permit is required. In addition to the special permit, a regular state or county hunting license must be in possession of persons hunting on the Wildlife Management Areas.

Game laws pertaining to the state in general as well as to the county or counties in which the individual areas are located, apply to the management areas with some exceptions. For example, no deer hunting is allowed on the Fisheating Creek Wildlife Management Area, although the deer is legal game in the county adjacent to that area. Another example is the St. Marks Area within which only ducks and geese may be taken.

About half of the wildlife management areas are located on public lands (Apalachicola, Eglin Field, St. Marks, Osceola, Ocala, Everglades, Webb, Corbett, Blackwater, Avon Park, Richloam, Croom and Little Talbot). The balance of the areas are managed by the Game Division through written agreements with the individuals and companies concerned.

In the seven years that have elapsed since the program was started, the plan has advanced in spectacular fashion. Nation-wide interest has been engendered by the progress made in the Game Division's management area project. In addition to promising a bright future for Florida's nimrods, the program bids fair to spread far beyond the boundaries of the Sunshine State to the lasting benefit of all of the nation's outdoorsmen. END.



This season the Game and Fresh Water Fish Commission will have open to hunting a total of 3,002,000 acres of land within the Wildlife Management Areas. In addition to a regular hunting license, a public hunt area permit is required for those desiring to hunt on the management areas.

Available from the offices of the County Judges, the $5.00 permit opens most of the 25 management areas to the hunter. Exceptions are as follows: Eglin Field where a $2.00 Air Force Permit is required in place of the $5.00 Public Hunt Permit, St. Marks where a $3.00 permit is required for each of the two days per season allowed each hunter, the C. M. Webb Area where a $5.00 daily permit is required, and the Everglades Area where no special permit is required.

	Name	Acres Open to Hunting	Acres Closed to Hunting	Ownership	County
1.	Eglin Air Force Base	390,000	70,000	U. S. Air Force	Santa Rosa, Okaloosa, Walton
2.	Blackwater		85,000	Florida Forest Service	Santa Rosa, Okaloosa
3.	Roy S. Gaskin	110,000	98,000	Private	Gulf, Bay, Calhoun
4.	Apalachicola	100,000		U. S. Forest Service	Liberty
5.	St. Marks	3,000		U. S. Fish & Wildlife Service	Wakulla
6.	Aucilla	100,000		Private	Wakulla, Jefferson, Taylor
7.	Steinhatchee	225,000		Private	Dixie, Lafayette
8.	Osceola	65,000	42,000	U. S. Forest Service	Columbia, Baker
9.	Lake Butler		96,000	Private	Union, Baker, Columbia
10.	Little Talbot Island		250	Florida Park Service	Nassau
11.	Gulf Hammock	100,000	20,000	Private	Levy
12.	Ocala	185,000	90,000	U. S. Forest Service	Marion, Putnam
13.	Tomoka	41,000	9,000	Private	Volusia
14.	Sumter-Citrus	30,000		Private	Sumter, Citrus
15.	Farmton	50,000		Private	Volusia
16.	Croom	17,000		U. S. Soil Conservation Service	Hernando
17.	Richloam	48,000		U. S. Soil Conservation Service	Hernando, Pasco, Sumter
18.	Holopaw	22,000		Private	Osceola
19.	Avon Park	108,000		U. S. Air Force	Polk, Highlands
20.	Okeechobee	16,000		Private	Okeechobee
21.	Fisheating Creek	100,000	175,000	Private	Glades
22.	Cecil M. Webb	57,000	5,000	Game & Fresh Water Fish Comm.	Charlotte
23.	J. W. Corbett	97,000		Game & Fresh Water Fish Comm.	Palm Beach
24.	Lee	85,000		Private	Lee
25.	Hendry	27,000		Private	Hendry
26.	Collier	300,000	50,000	Private	Collier
27.	Everglades	720,000		Central & Southern Florida Flood Control District	Palm Beach, Broward, Dade
28.	Woodruff	6,000	1,000	U. S. Corps of Engineers	Jackson
	TOTALS	3,002,000	741,250		
	Grand Total	3,743,250			

FISHEATING CREEK WILDLIFE MANAGEMENT AREA

THE 100,000 ACRE Fisheating Creek Management Area is located west of U.S. Highway 27 in Glades County. It is north of LaBelle and east of Palmdale. In 1952, the Game and Fresh Water Fish Commission entered into an agreement for the management of this area with the principal landowners, Lykes Bros. Inc. and the Bee Branch Cattle Company. The Commission's lease was renewed, in 1955, for a two year period.

The outstanding landmark of the area is the Fisheating Creek Swamp which, along with Bee & Jack's Ranch, comprises the chief turkey hunting section within the management area. Hammocks, sloughs, ponds, palmetto flatwoods, and bay heads make up the balance of the wildlife habitat.

Although there is a variety of wildlife, turkey and quail are the principal game species hunted here. The deer population is comparatively low and for this reason no deer hunting is allowed.

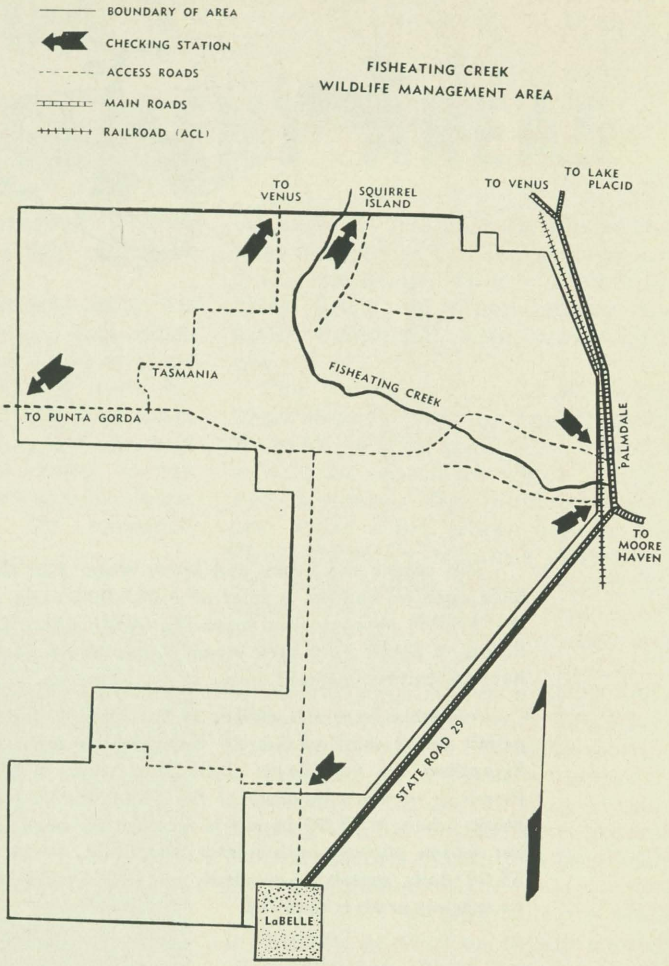
Scenic beauty and excellent fishing combine to make the Fisheating Creek Area a year around favorite with campers and fishermen.

Each year from 20 to 25 turkeys, live-trapped from the breeding ground in eastern Glades County, have been released on the management area. The birds are banded in an effort to obtain information on survival and movements. Releases are made after the close of the area's hunting season. A majority of the banded birds that have been taken by hunters during subsequent seasons have been killed near the original release site, several as much as three years after banding. This fact indicates that numbers of the transplanted birds survive successive hunting seasons and gives rise to the conjecture that legal hunting may not be an important factor in determining the population during successive seasons.

From the data thus far assembled, it seems likely that illegal hunting and inclement weather during the nesting season are the two foremost factors limiting the turkey population in this area.

During the spring nesting seasons of 1953 and 1954 the occurrence of successive heavy rains had an adverse effect on both turkey and quail production. Weather during the 1955 nesting period was more favorable to turkey with resultant higher nesting success, a factor which should reflect favorably upon the 1955 kill.

Camping is permitted on the area at all times and hunters may choose their camp sites. Dogs and guns are prohibited except during hunting season. On the Fisheating Creek Management Area shotguns only are permitted for hunting purposes.



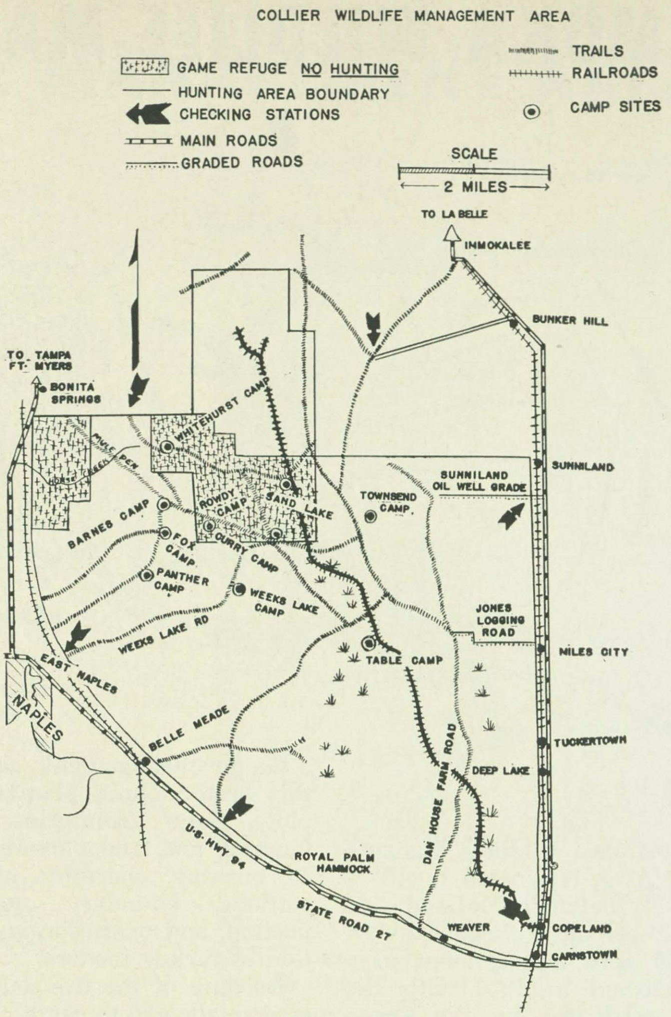
For exact location of all Wildlife Management Areas, check map and chart on page 17.

GAME KILL ON FISHEATING CREEK MANAGEMENT AREA

	Turkey	*Quail*	*Squirrel*	*Dove*	*Duck*	*Snipe*
1952	296	5061	...	...	...	..
1953	240	3046	588	199	127	..
1954	229	3475	941	102	154	25

Evaluation of turkey feeders such as the one shown in the photo above is one of the projects being conducted on many of the Commission's wildlife management areas.

COLLIER WILDLIFE MANAGEMENT AREA



For exact location of all Wildlife Management Areas, check map and chart on page 17.

THE 350,000 ACRE Collier Wildlife Management Area, located in Collier County's Big Cypress Swamp region, is the largest of the Commission's public hunt areas operated on privately owned land.

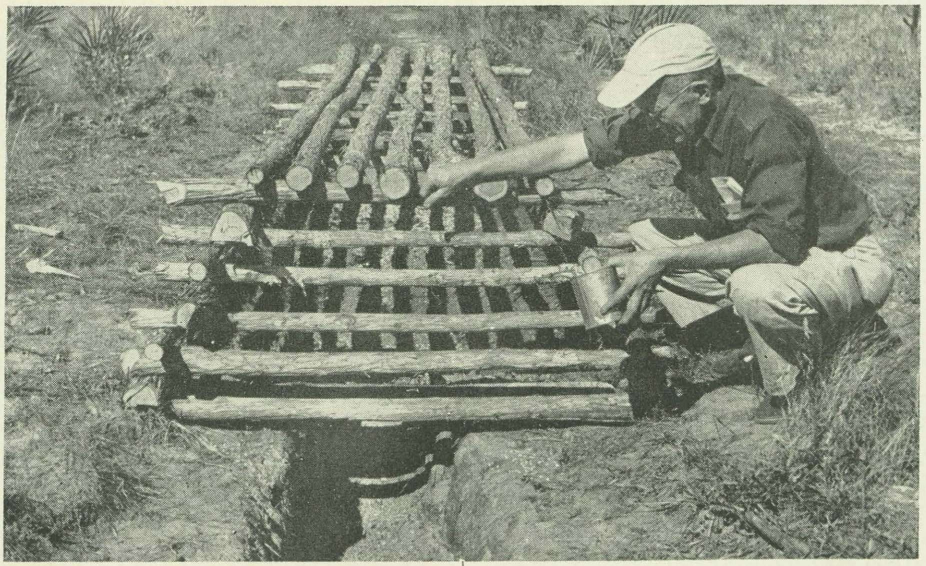
In 1951 when the project was initiated, the Collier Company and the Curry Lumber Company owned all lands within the management area. Since that time about 85,000 acres have been transferred to a number of different individuals and companies, most of whom have thus far been willing to allow their holdings to remain under the original management agreement with the Game and Fresh Water Fish Commission.

The terrain of the Collier area is so flat that there is not a single well defined stream or channel but rather wide, shallow, irregular sloughs. The vegetation consists of broad expanses of scrub cypress and Caribbean pine, interspersed with strands and heads of large cypress, higher islands and ridges of pine timber, cabbage palm, and saw palmetto. This forms good habitat for turkey and deer, the principal game species hunted.

The primary research activity which is presently being conducted on the Collier Management Area is concerned with the evaluation of artificial turkey feeders and water holes. During the past two years, 101 turkeys, live trapped from Commission controlled breeding grounds, have been released in this section.

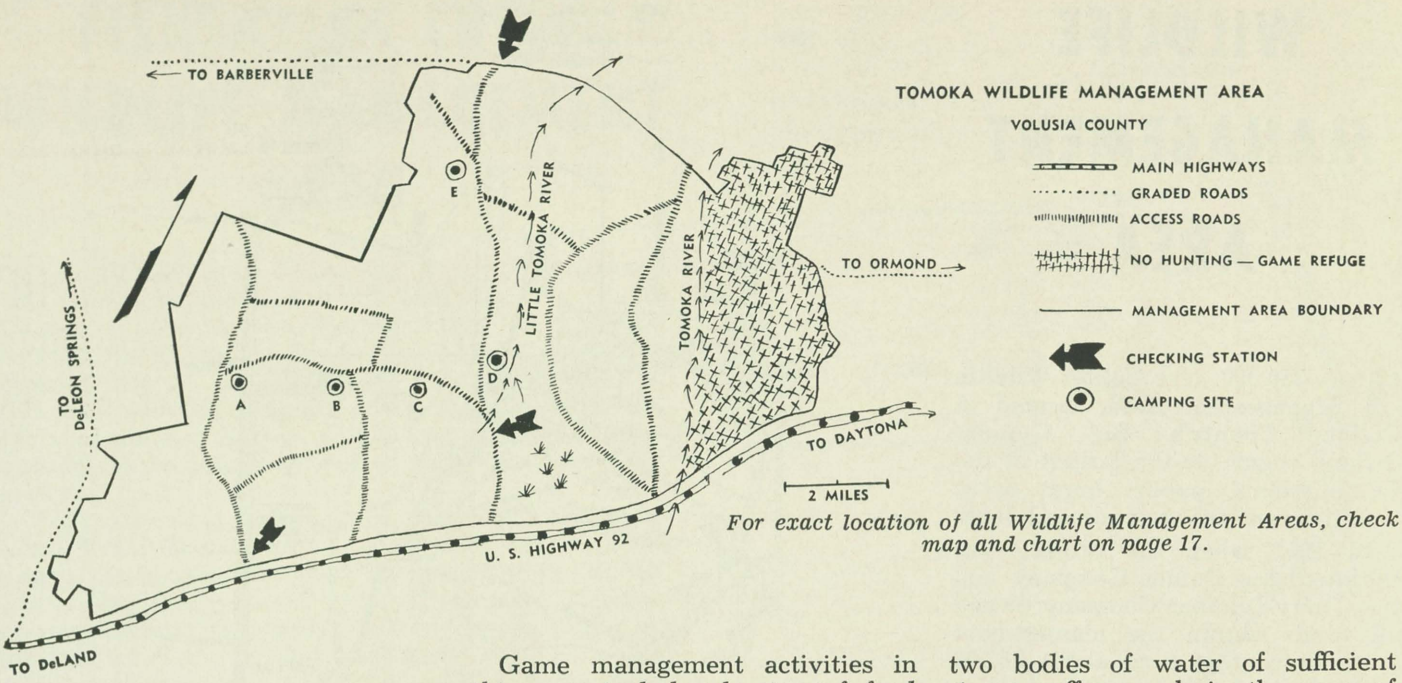
The following table shows the game kill for the past three hunting seasons, as compiled from data obtained by checking station operators;

				Squirrel					
Year	*Deer*	*Turkey*	*Quail*	*Fox*	*Cat*	*Dove*	*Duck*	*Snipe*	*Bear*
1952	87	679	1021	. . .	258	140	2	. .	.
1953	36	502	1704	80	121	127	22	27	1
1954	47	179	695	101	179	146	33	. .	2



The design is an old one but it still catches birds. A game division employee examines one style of trap used to obtain wild turkeys for tagging and restocking.

TOMOKA WILDLIFE MANAGEMENT AREA



For exact location of all Wildlife Management Areas, check map and chart on page 17.

The Tomoka Wildlife Management Area is located north of Highway 92, between DeLand and Daytona Beach in Volusia County. The 50,000 acre management area was established in 1950 with the execution of leases by the Game Management Division with two major landowners, the Hudson Pulp and Paper Company and the Tomoka Land Company.

There are two major wildlife habitat classifications within the Tomoka area. The flatwoods with typical slash pine, saw palmetto, gallberry, and wire-grass association occupy 47% of the total acreage. Softwood swamp with pond cypress, black gum, fetterbush, wax myrtle, and greenbriar makes up 48%. The balance of the habitat consists of sand pine-scrub oak ridges, cabbage palmetto-magnolia hammocks, and a minor representation of open prairie and water.

Deer and turkey are the principal game species hunted on the Tomoka Area but quail, cat squirrels, and fox squirrels are taken in some numbers. The following table indicates the game kill as compiled from checking station records;

		Turkey			*Squirrel*			
	Deer	*Gobbler*	*Hen*	*Quail*	*Cat*	*Fox*	*Dove*	*Duck*
1951	25	5	..	6	...	..	..	.
1952	29	8	8	8	109	7	..	.
1953	22	10	8	44	46	11	..	.
1954	14	13	18	54	140	10	13	1

Game management activities in this area include planting of food plots, game inventories, food plot fencing, fire lane plowing, controlled burning, operation of checking stations, boundary maintenance, posting, and operation and observation of turkey feeders.

Because of the fire danger, hunters are allowed to camp only at designated camp sites. The camping places are well shaded and located near water.

The Tomoka Management Area is open to fishing but there are only two bodies of water of sufficient size to offer much in the way of angling. Indian Pond is 63 acres in size and Scroggin Pond, 46 acres. Both are underfished and overpopulated.

Except during the hunting season, most of the gates along the boundary fence are kept locked, excluding use by the general public, except on permission. The Indian Pond section is the one exception for this portion of the area is open to fishing and other recreational uses at all times. END.

Tomoka Management Area Technician Dick Harlow checking the amount of grain remaining in one of the turkey feeders he maintains.

OCALA WILDLIFE MANAGEMENT AREA

In 1938 the Ocala Wildlife Management Area was established through a cooperative agreement between the U.S. Forest Service and the Game and Fresh Water Fish Commission. The management area is located in Marion, Putnam, and Lake Counties and lies within the boundaries of the Ocala National Forest. The management area consists of 53,080 acres which is reserved as a National Wildlife Refuge and 203,580 acres available for public hunting.

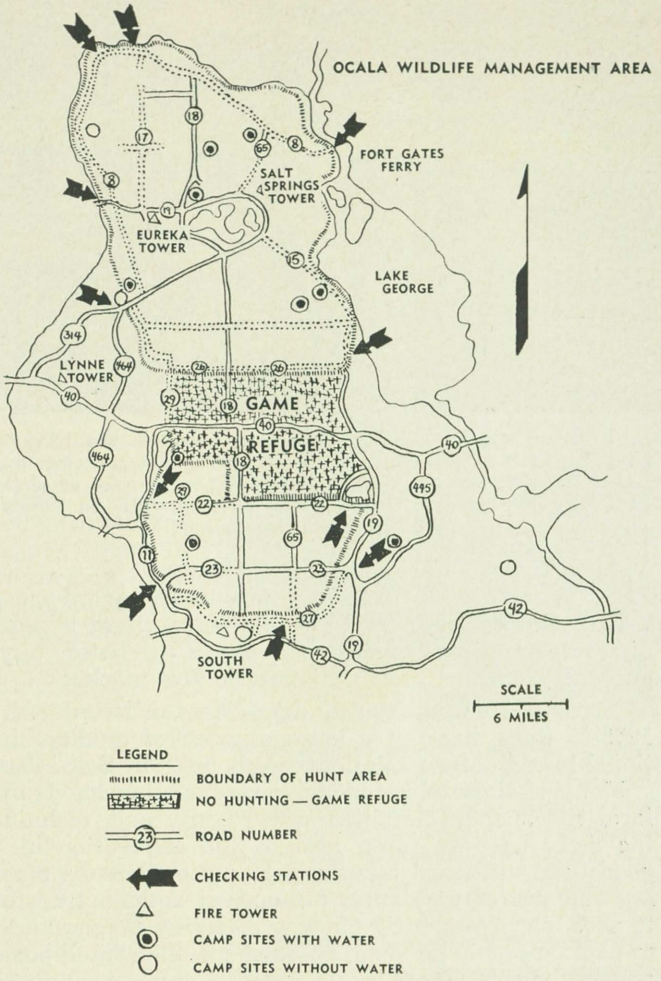
In 1950, the Game Management Division assumed supervision of the annual hunts which previously had been conducted by the Forest Service. Although a major portion of the land within the management area is controlled by the U.S. Forest Service, there are a large number of private land owners who, with one exception, have title to relatively small holdings. The Salt Springs Corporation controls 10,000 acres of land which is closed to the general public.

Of the five habitat types occurring within the Ocala Management area, the Sand Pine, or "Scrub", predominates, occupying 68% of the total acreage. The longleaf pine-wire grass "island" type takes in about 12% of the territory and hardwood swamp about 7%. The balance is composed of flatwoods, prairie, and open water.

Game species on the Ocala include deer, bear, panther, fox squirrel, gray squirrel, turkey, quail, dove, ducks, and snipe. The deer is the attraction which brings most hunters to this management area.

A comprehensive study of the deer herd is the major research project in progress at the present time, although varying amounts of time and effort are devoted to problems concerned with other forms of wildlife.

The following table shows the game kill for the past three hunting seasons, as compiled from data obtained by checking station operators;

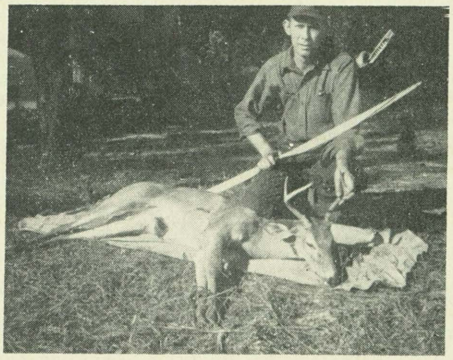


For exact location of all Wildlife Management Areas, check map and chart on page 17.

			Squirrel					
	Deer	*Quail*	*Gray*	*Fox*	*Duck*	*Bear*	*Turkey*	*Dove*
1951	345	38	841	46	25	1	....	11
1952	501	370	2408	..	53	4	....	32
1953	524	319	1519	66	38	.	29	5
1954	593	144	2776	101	141	2	12	43

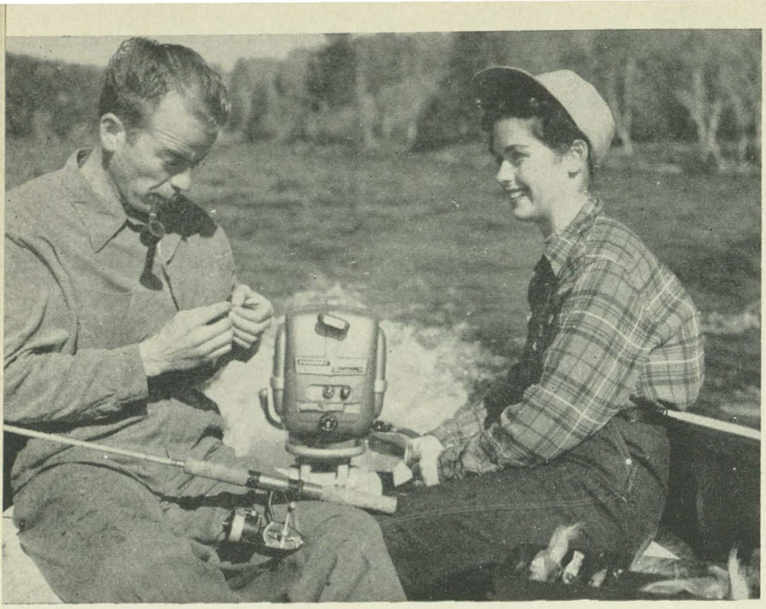
While the Ocala Wildlife Management Area is well known for its deer hunting, other recreational opportunities such as fishing, boating, camping, and swimming attract thousands of people to the area each year. There are literally hundreds of lakes, ponds, and streams where fishing is good.

Camping is permitted on the Ocala but only at designated camp grounds or recreational areas. Camp ground facilities which are provided and maintained by the Forest Service include shelters, tables, water, and rest rooms. END.



Special archery hunts attract many bow and arrow enthusiasts to the Ocala area each fall.

The Ocala Management Area is known throughout the state for the excellent deer hunting it offers.



Introduction of quiet-running models, as found in the 1955-56 lines, has put a large number of quality, national brand older outboards like this one on "For Sale" lists. There is a lot of service and investment economy in the better buys currently on Florida's used outboard motor market.

✓CHECK TH

By EDMUND McLAURIN

Almost a "must" item for the Florida hunter and fisherman, the outboard motor makes available areas which would be out of reach to those depending on other means of transportation. Here an authority on the subject gives some valuable pointers on selecting an easy-on-the-wallet, used "kicker".

As WITH A GOOD USED CAR, pre-tested by informed purchaser or a reliable mechanic, there is a lot of service and investment economy in the better buys currently on the used outboard motor market.

Introduction of quiet-running models, as found in the 1955-56 lines, has put a large number of quality, national brand older model outboards on "For Sale" lists.

Many of these older models are changing hands via local newspaper classified advertising, and scanning the daily ads can often lead to the acquisition of a good used outboard at a bargain price. Persons making changes of residence, because of sudden transfer to new jobs, frequently put low prices on heavy, hard-to-pack-and-ship personal possessions—like small boats and outboard motors.

However, it is smart to know just what you are getting when you hand over the cash, especially when dealing with a seller who may not be around next week to make a refund if the purchase doesn't measure up to his claims and your voiced expectations.

Don't buy any second-hand outboard motor just because its disposal price represents a big savings. The motor's true value to you depends on whether or not it is powerful enough to do the job you expect it to do; how it will balance and perform on the boat of intended use, and its probable useful life. Small, light motors of 3 h.p. and under may be O.K. for use on shallow-draft craft, like canoes and rubber rafts, but won't give much satisfaction on heavy boats or give you speed. You have to go above 5 h.p. to drive fairly heavy craft at anything resembling a fast clip. If you want speed, consider the heavy-duty, big twin outboards; they are powerhouses of tremendous energy output, yet, generally, are not too heavy for convenient car transport.

Because there is more to an outboard than its exterior, you cannot determine the true condition of a used motor by its outward appearance alone. However, a careful examination of the visible parts can usually tell you a lot about what kind of care it has received at the hands of its owner—if you know what to look for.

A second-hand motor that is being considered for purchase should, first of all, look well cared for over the period of ownership, not recently scrubbed down with gasoline and then touched up with aluminum paint to give the motor an impressive sales appearance. Applied touch-up paint is nothing against a used motor; in fact, it shows interest and care on the part of the original owner. But inspect carefully those used motors that have a completely new paint job. A coat or two of paint can cover up a multitude of past abuses —including dents hammered out just prior to planned sale, tiny cracks and serious pits in metal parts and other indications of lack of care.

Another thing: Just because the seller starts the motor and lets it run a couple of minutes, while fastened to its stand or other support, don't take it for granted that everything is all right. Even a motor in poor condition, if it will run at all, will perform when there is no water resistance against the propeller. If an actual demonstration on a nearby body of water can possibly be arranged, ask for it. There are certain inherent motor idiosyncrasies common to all gasoline powered engines, that only a trial run will enable you to note and evaluate.

Some outboards steer hard—because of too much friction in the lower bracket bearing, primarily, and again because, in the larger sizes especially, there is frequently a powerful steering leverage created by the motor's tendency to exert full thrust of power in a particular direction. Such motors require a constant hand on the steering controls, or substitution of remote controls and a forward steering mechanism. Only a trial run will tell the prospective buyer just how a used outboard will steer at different operating speeds.

If the motor vibrates excessively during running tests, suspect bad bearings in the gear housing, or misaligned or warped propeller. On the other hand, objectionable vibration may be caused by such simple things as loose clamp screws or improper fuel mixture.

And only a lengthy trolling test will indicate how well a used motor will throttle down and cruise along without coughing or dying out. If the trial run indicates that the unit will operate smoothly when moving at only 2 miles per hour, you probably won't have any trolling trouble after ownership changes.

T USED OUTBOARD MOTOR

In the event that an actual trial performance on a suitable boat cannot be had, then there are other tests which you can make to assure yourself that the motor is worth the price asked.

Carefully examine the fuel tank, all controls, brackets, etc. Deep dents in the gas tank and broken or patched parts are signs of abuse. Neglect by the owner is likewise reflected in the degree of corrosion in the drive-shaft housing and the general lower unit. The outboard manufacturers will echo our statement that such corrosion is usually caused by leaving the motor on a boat for long periods.

Examine each propeller blade carefully for minute cracks. If any are present, you can count on continued usage to bring about growth in their length and size, with eventual breakage. Minor nicks and dents (provided there is no misalignment of propeller and shaft) in the blades of a propeller are not to be listed as demerits. Unless serious, these can be ground or polished out.

An outboard motor, in order to run well, should have good compression, and if its compression is not up to par, then you can expect to find other defects—meaning possible cracked or badly scored cylinders; rings frozen in their grooves, or breaks that go entirely through the jacket to the inside, or blown gaskets.

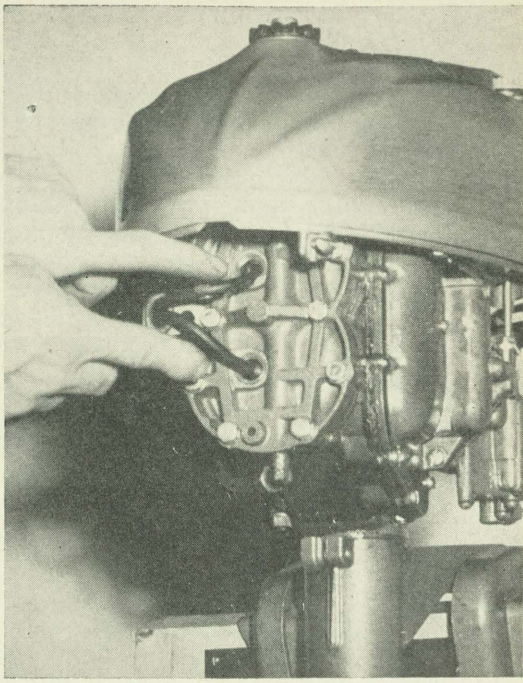
To make a compression test, the spark plugs should first be removed. Then the flywheel should be turned by hand, while you alternately place your thumb over each spark plug hole to assure yourself that there is enough compression generated to force your thumb from the respective holes.

A test with a compression gauge is more accurate, and registered pressure should read at least 65 pounds and preferably 75 to 85. Poor compression may require costly cylinder repairs to correct.

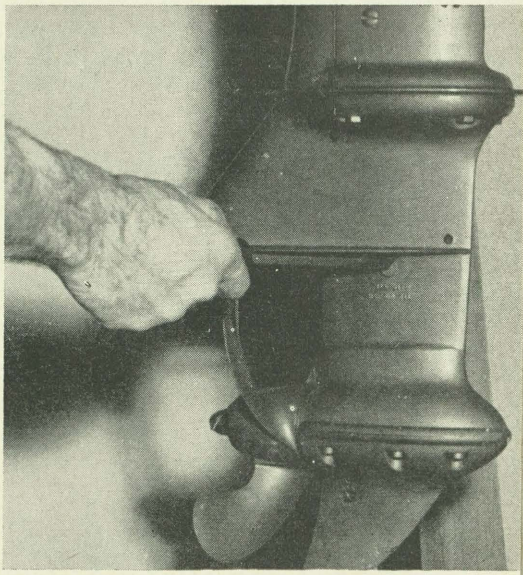
While you have the spark plugs removed, examine them closely even though you intend to install new ones (always a good idea) should you decide to buy the used outboard. Motors of gasoline combustion type perform best with spark plugs of correct heat range. According to H. H. Vogel, director of engineering of the Champion Spark Plug Company, one of America's foremost manufacturers of these component parts for gasoline engines, a rusty brown to grayish tan color of the firing end of the insulator indicates that plugs of the right heat range are being used. Where the end of a plug is fouled with black, oily deposits, however, the plug usually has been performing too cool and a hotter type should be substituted, Vogel explains. He points out, though, that this same fouling condition can often be caused by mixing too much oil, or the wrong grade of oil, with the fuel.

Overheated spark plugs, Vogel describes, are those distinguished by a white, burned or blistered in-

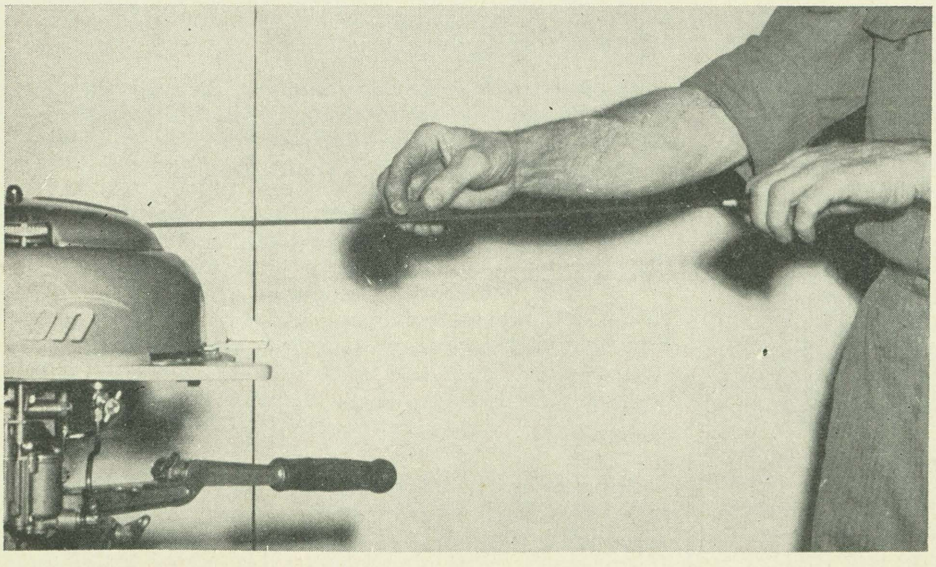
(Continued on Page 41)



When spark plugs are removed, be sure to ground the wires against metal parts so that any generated current will not jump the coil winding of the magneto and possibly damage it. To test the magneto, with plugs removed, ground one ignition wire against a metal part, holding the other lead 1/8" to 1/4" from the metal, at the same time turning the flywheel by hand. The resulting spark will reflect the condition of the magneto.



Above: Removal of the lower grease plug will show whether or not the motor was drained prior to storage. Long neglect will be indicated by rusting and pitting of the bearings.



Left: If a little candle wax rubbed on the starter rope does not reduce friction and make for easy pulling of the starter cord, look further for the trouble.

FISH CONSERVATION FUNDAMENTALS

By R. W. ESCHMEYER

PART SEVEN: USING THE TOOLS

UP TO THIS point we have discussed, briefly, the general fish conservation picture, and the use of the five major fish management tools. In those states where these tools are used wisely, fishing appears to be improving instead of continuing down-hill as pressure increases. The problem seems to be one of being able to use the tools effectively and of making them constantly more useful.

This is part seven of a fourteen part series presenting the fundamentals of modern fisheries management. Prepared by the late Dr. R. W. Eschmeyer, the series has thus far been so popular with the readers of Florida Wildlife we feel that many of our readers would like to have the complete series in handy form for future reference. Fish Conservation Fundamentals has been reproduced in its entirety, bound in an attractive heavy-paper cover with thirty profusely illustrated pages. It may be obtained for $.25 per copy from the Sport Fishing Institute, Bond Bldg., Washington 5, D. C.

Increased Knowledge

A look at these five management methods tells an interesting story. We were frequently off base on stocking—until research brought us to our senses. Even then, we still had the problem of bringing about a change in public concepts, an admittedly difficult problem.

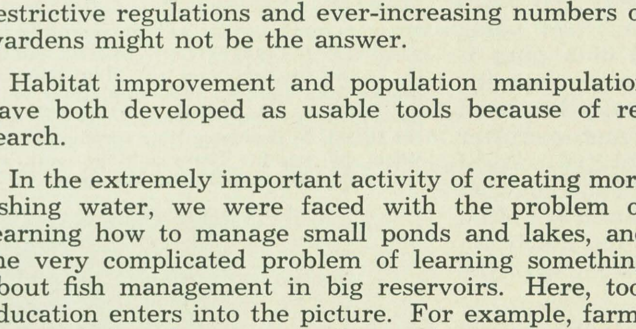
Many of our regulation practices were ineffective or did more harm than good—until fact-finding came along to point out our errors and put the regulation matter on a sounder basis. Then came the problem of educating the public to realize that more and more restrictive regulations and ever-increasing numbers of wardens might not be the answer.

Habitat improvement and population manipulation have both developed as usable tools because of research.

In the extremely important activity of creating more fishing water, we were faced with the problem of learning how to manage small ponds and lakes, and the very complicated problem of learning something about fish management in big reservoirs. Here, too, education enters into the picture. For example, farmers needed to learn many things about their newly acquired aquatic pastures before they could learn to handle them intelligently.

Selling the Facts

Basic fish conservation has progressed, then, because of two items—research and education. Its future depends on expansion of these same two items.



This situation is not unique, it parallels development in other fields of science. Medicine has made immense strides; the average life expectancy has been rising constantly and impressively. Why? Because medical research has pointed the way to better diagnosis and more effective remedies, and because our health-education programs have caused public enlightenment. The change in farming methods and crop production can be attributed to these same items—research and education. A look at other sciences tells the same story.

There's a third item in all instances—professional standards. The specialists must know how to use the tools, how to get the proper facts, and how to educate the public in sound programs. The best of medical research would do us little good if we were to have a "quack" treat our ailment.

Research and education will be discussed separately, later, but a few points which concern both will be mentioned here very briefly.

In both these important matters, progress depends partly on the amount of money available for the programs. But it depends very much, too, on the caliber of the people who handle those programs.

It might be indicated, too, that in one respect the two activities, research and education, are inseparable; the one can't be effective without the other. Facts are of little value until the public accepts them; education, without basic facts provided by sound research, may be miseducation and may do more harm than good.

Dilemma

One extremely important question is this: If these two items will determine the future of our fishing, why don't they receive priority, if not top priority, in some of our states? Why are there still states which do little research or conservation education, or none at all?

We don't know the complete answer, but that shouldn't prevent speculation on the matter. And, it should be stated, first, that a considerable number of states now have big and growing research and education programs. We've made decided progress in both, especially in research because of the availability of Dingell-Johnson (federal aid) funds.

Several groups enter the picture: (1) the researchers and educators themselves; (2) the administrators; (3) the commissions; (4) the legislatures and, in some instances, the governors; (5) the sportsmen; (6) the colleges and universities; (7) the press. There are probably others, but these seven stand out.

Where rapid progress is made we can sometimes attribute it to one of these groups, sometimes to a number of them. Likewise, where the state is not progressive in fish conservation, one or more of these groups is usually responsible.

There was the fishery administration, for example, which had no use for researchers. Its interest seemed to be centered on building more and more hatcheries. A student took graduate work in this state, and took it in fisheries even though this was unusual at the institute in question. His doctorate problem led him in contact with a number of sportsmen's organizations in the general area. The sportsmen not only cooperated, they learned to recognize the importance of research. The biologist was put on the state fishery staff—perhaps because this had become the proper thing to do from a public relations standpoint. This state administration has tolerated a trained fish man ever since. Here, the campus, the local sportsmen and the biologist, collectively, paved the way to progress.

Of course, there are instances, too, where biologists have had ample opportunity to do a good job, but where they muffed that opportunity for one reason or another.

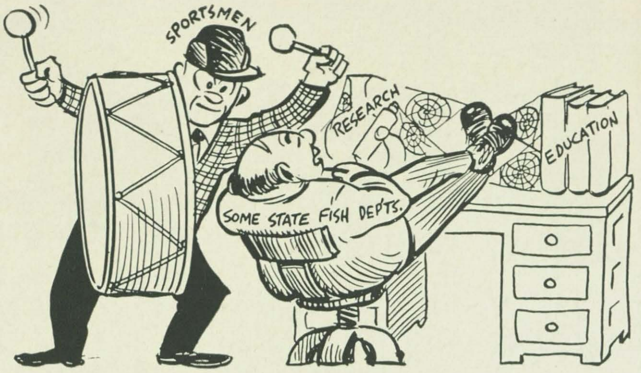
There are a few instances where the administrator is the key bottleneck, and in a few instances the commission is the damper to progress. But, we also know of many administrators and commission members who have pushed for fact-finding and education, even though this made their own jobs more difficult and more precarious.

Most interesting has been the impact of organized sportsmen on the matter. We know of several instances where they, through wise leadership, took extremely backward situations, conservation-wise, and modernized them. This was done simply by effective, specific and organized demand to the state legislatures and the governors. The groups made it politically unwise for the elected public servants to do other than pave the way for improvement. We had an opportunity to watch one of the developments at close range over a period of several years; it was an interesting observation.

Of course, we have organized sportsmen in our least progressive states as well as in the most progressive ones. The mere presence of such a group, even a big one, does not necessarily assure progress.

As for the campus, it has greatly aided conservation research and education in some states. It has been of little or no value to these programs in others.

In some states, an individual far-sighted outdoor writer may have been the key figure to progress. And, we still have a very few writers who display a strong dislike for any program involving professionally trained conservationists, regardless of the merits of the program.



Future Progress

Most progress is made where all or nearly all of the above-mentioned groups work for improvement. The states least likely to progress would be those with few research and education men (and with these few poorly qualified for the job), with administrators who don't want progress, with commissioners whose main interests may be political, with a legislature which exercises complete control over the fish (and game) program, with organized sportsmen having a weak or self-seeking leadership, and with the campuses of the state uninterested in fishery research or conservation education. Fortunately, you can count the states which are in this completely unprogressive situation on the fingers of one hand—even after cutting off some of the fingers.

Actually, interest in research and education has been growing rapidly and more funds are becoming available. In fact, there are instances where this rapid change has created an interesting problem—where the biologists or educators, after long periods of crying for more funds, were not prepared to use these added funds as intelligently as they might have, once the money became available. This was especially true when Dingell-Johnson (federal aid) money rather suddenly made greatly enlarged research programs possible.

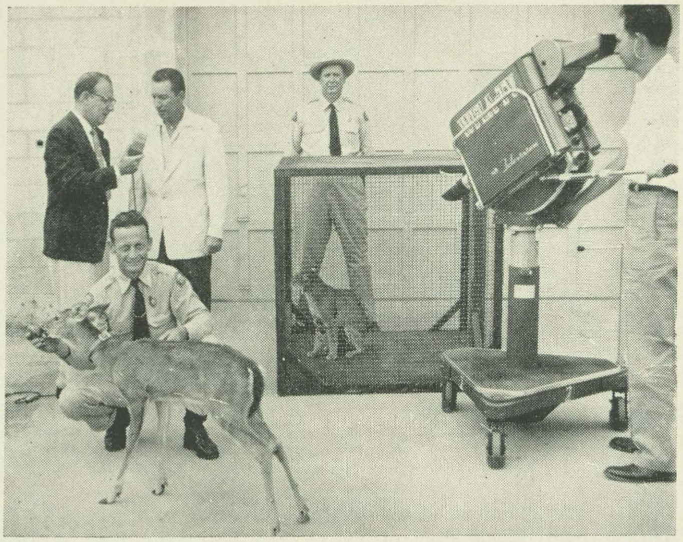
Though the research and education picture is a bright one, an important aspect of it is not encouraging. As mentioned earlier, the caliber of the personnel is extremely important. This, in turn, will generally be determined by such factors as salary, opportunity for advancement, and security. But, in research, after about five years of college training, the fishery biologists can expect only a low salary. Annual pay for these men on federal aid programs, as of 1953, averaged only $3,900. Too, the work has its unpleasant moments from a public relations standpoint, though in many states this aspect is improving.

If our all-important activities of research and education are to improve constantly, such matters as improved salaries must have serious consideration.

END

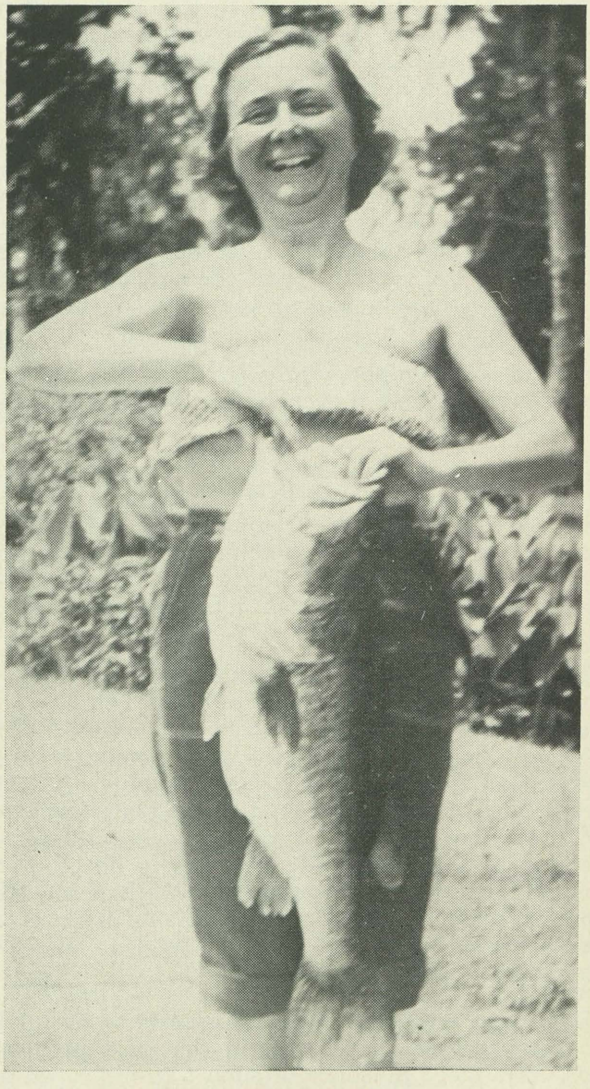
AROUND

THE



Sports Caster Milton Spencer, WFLA-TV, talks with Commission I&E Officer Bob Revels during recent wildlife program put on the air by the Tampa TV station. Wildlife Officers J. H. Williams (with deer) and H. C. McLeod helped with the program.

Jim Clower, Jr., (left) and R. G. Breeden of Eustis display a nice catch of bass taken from one of the numerous fishing "hot-spots" near Eustis.



Mrs. Margaret Woodhouse staged a fishing exhibition for her husband, well-known WDNC official and sportscaster Woody Woodhouse of Durham, North Carolina, during a recent visit to the Bass Capital area near Crescent City. The 9¾-pound largemouth found a Johnson spoon too tempting to resist.

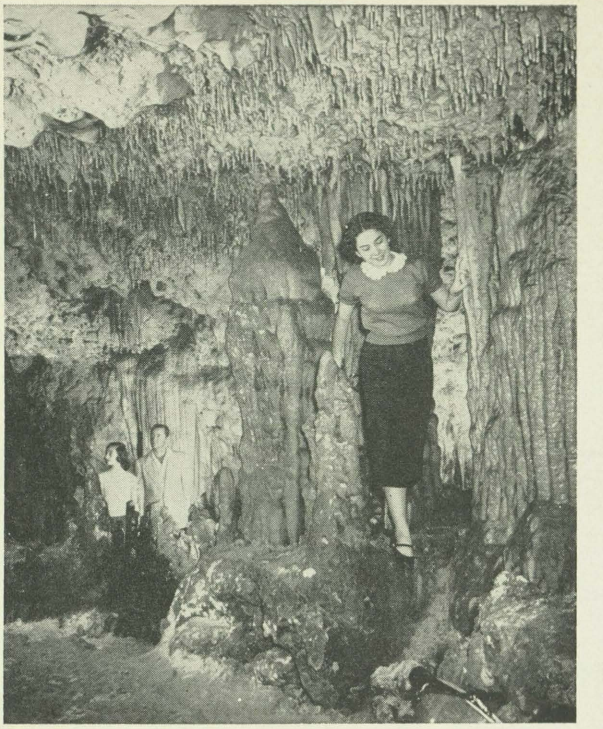
FLORIDA
GAME and FRESH WATER FISH
COMMISSION

Recently assigned as pilot to the Game and Fresh Water Fish Commission's Northeast Region office at Lake City, Forrest Neujahr is pictured beside his plane at Lake City Airport. The newly appointed pilot came to the Commission from duty in Alaska. (Lake City Reporter photo by Paul Roy.)

STATE

Bethel Leggett (center) Taylor County Wildlife Officer receives Woodmen of the World plaque in recognition of his outstanding service to conservation in Taylor County. L. P. Gibson makes the award assisted by Earl Jackson. Officers of the Perry Camp of the Woodmen of the World are, back row, l. to r., Clarence Giddens, Earl Young, and Billy Starke.

VISIT FLORIDA'S PARKS



Located near Marianna, the Florida Caverns State Park is one of 28 scenic and historical sites maintained by the Florida Park Service. Natural air conditioning maintains the temperature below a maximum 63 degrees even during the hottest of mid-summer days. The caverns are lighted and guide service provided. This popular park is open to visitors from 7 a.m. to 6:30 p.m. on weekdays and from 8 a.m. to 7 p.m. on Sundays and holidays.

Even during the heat of mid-summer the angler with know-how can find good bass fishing in every part of the Sunshine State. Fishing in deeper waters during the day, or in the shallows during early morning, late afternoon, and night hours will amply reward the persistent fisherman.

THE PONCHO

By PAUL MacALESTER

BEDROLL, emergency sail, all-purpose raingear and camouflage covering. One piece of equipment—the Marine Corps camouflaged poncho—fills all these needs, and a host of others.

The writer has found that local Army & Navy surplus stores are veritable treasure houses for the hunter and fisherman; and the best four dollars ever spent was for the poncho.

The poncho—a great square of cloth, conventionally worn as a form of cape, is unlimited in its uses. It has kept me dry and snug through many a thunderstorm, when caught out on a lake or river, in quest of bass or perch.

The poncho as issued by the Marines is made of a tight-woven textile, impregnated with a waterproofing chemical. One side is finished in a dull-green mottled camouflage, while the other is a tan-and brown combination.

The raincoat or rainjacket has its place too—but the poncho alone affords comfortable protection and shelter for two or more persons, or for valuable hunting or fishing gear.

When donned as intended, the wearer thrusts his head up through the neck-vent provided in the center of the poncho and snaps the two side-edges together, closing in the sides and providing shapeless sleeves. Top this off with a wide-brimmed, water-repellent hat and you have first-class protection against the elements.

The waterproof qualities of the poncho can be improved through the use of paraffin and a hot iron. Simply take a chunk of paraffin and rub it lightly over the surface of one side of the poncho, being sure that the surface of the material is uniformly covered with the paraffin. Then turn the poncho over and apply a moderately-hot iron to the reverse side. The heat causes the paraffin to flow into the material, bonding it into the fibers, so that it does not crack or chip off. This method is often used in waterproofing tents.

In a pinch, the poncho can be used as a life preserver by using either half outside the neck-vent, grasping the edges and bringing it down sharply on the water. By keeping the air in, holding the open ends under water, air enough to support a man can be retained.

The duck hunter especially, will find the ubiquitous poncho a blessing.

That shiny outboard motor can be blotted out very nicely under its folds. In addition to covering the motor, the waterfowler will find he can tuck gas cans, shell boxes and other gear under its edges. Two of them will suffice to cover the entire bulk of the average rental skiff or utility boat.

The poncho will also provide overhead cover for the hunter afloat or ashore who wishes to escape aerial detection by sharp-eyed ducks or geese.

Afloat, we worked out the following gimmick for an overhead screen:

We purchased four hardwood dowels from a lumber supply house—two of them approximately 4½ feet long and two more about three feet long. To this purchase we added four king-sized "C" clamps and two kitchen-variety cup-hooks.

Two ponchos were used in this project. The edges of the two were joined by putting together the male and female snap-fasteners found on each. The dowels were then clamped to the gunwales of the skiff—the longer ones to the open, or firing side, and the shorter ones to the rear.

The boat was moored sideways in a clump of reeds at the edge of open water, or at right-angles to the decoy stool. This gives two gunners in the same boat a wide field of fire, without interference from each other.

The kitchen cup-hooks were screwed into the tops of the two longest dowels. Then the poncho was fastened to these two dowels by means of two small holes made in its leading edge. The rest of the poncho was then draped back over the shorter rear dowels and over the bow and stern of the skiff—providing a shapeless lean-to which screened any of our movements from birds circling overhead to inspect our decoys.

——MAID OF ALL WORK

On land, the same routine with the dowels could be used, making the dowels perhaps a little longer, and by filling in the front and sides with a screen of weeds or brush.

A variation of this idea would be the use of netting similar to that used during World Unpleasantness No. 2 to cover artillery emplacements. Actual surplus service netting might be found through a surplus outlet, or discarded commercial fish netting could be used.

One of the main features of the netting is the varicolored cloth strips. The service camouflage netting comes already equipped with such strips. In the case of home-made netting, the hunter could supply the need with strips cut about two inches wide and two or three feet long. These could be dyed several basic colors—dark green, light green, brown, yellow and tan. They would then be woven through the netting in aimless patterns.

The main thing to avoid is regular pattern. Nature is rather lackadaisical about her camouflage efforts; the smart hunter follows suit.

The netting could be suspended over the duck-boat in the same manner described above.

But to get back to the poncho.

I have found it a handy piece of equipment on saltwater fishing trips in small open boats. Using four dowels of equal lengths and the "C" clamps, the poncho can be quickly rigged into a fine awning against the Sun's glare. On the trip back, the spray can be kept off the poor wretch who must sit in the stern and guide the outboard motor through wind-driven spray.

Many tales have been told of the wide variety of uses to which the poncho has been put, but one of the strangest and cleverest was the conversion of an outboard-powered skiff into a sailboat.

It was a fine, breezy day on Lake Okeechobee when the hero of this tale— a quick-witted citizen—found that his kicker had konked out. He was some four or five miles from the lake's shore and without assistance. Visions of the long row and the raw, blistered hands he would have, swam before his eyes.

As he disconsolately eyed his trusty poncho, he was struck by a brilliant idea.

Resolutely, he took the laces from his shoes. He jammed the boat's two oars, blade down, through spaces in the gunwale rails, about amidships. Then he fastened the two upper corners of the poncho high on the oar looms with his shoe-laces. The two lower corners of the poncho were secured to the gunwale rails with pieces of fishline.

He raised the motor clear of the water and then removed a plank from a seat up forward. This served as a rudder.

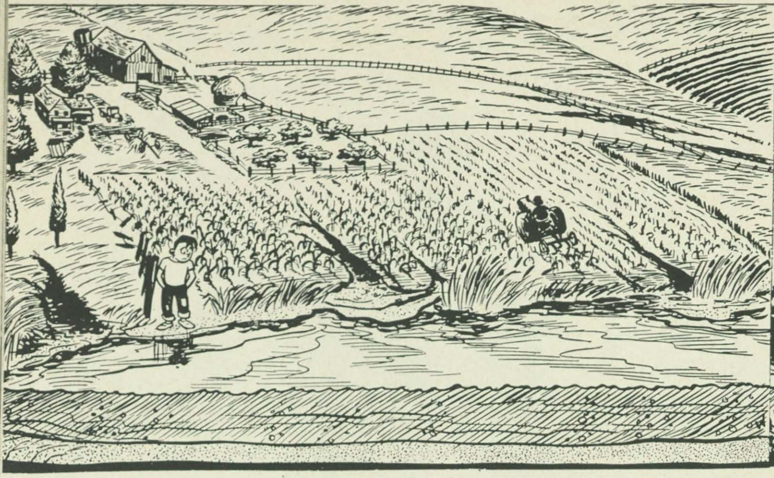
With the wind at his back, this lazy genius jauntily set sail for the distant shoreline, looking for all the World like a Lipton Cup winner.

Combined with a sturdy wool blanket, the utilitarian poncho doubles as a snug, waterproof bedroll. By setting up a pallet of palmetto fronds or pine boughs for comfort and surface drainage, the hunter or fisherman marooned in the wilderness can sleep the night through in reasonably dry comfort.

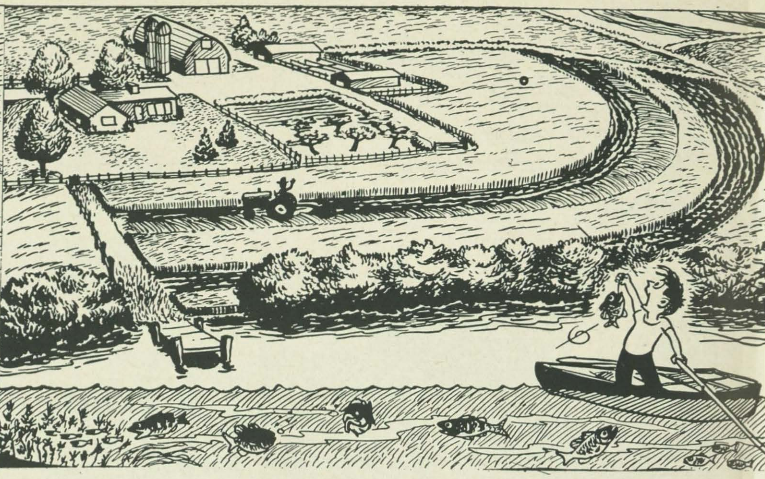
The close-woven texture and waterproofing of the poncho retains body heat and can keep a bed in a hunting cabin warm on the coldest night. Hunting cabins are notorious for scarcity in the weight and number of blankets provided—there are never enough on a cold night. The poncho tucked over the host's offering of covers can keep you warm as toast, providing a good night's sleep before that all-important hunt.

Does your wife scream about taking good wool blankets to the beach? The poncho makes a fine

(Continued on Page 39)



POOR FARMING — POOR FISHING



GOOD FARMING — GOOD FISHING

FARMING AND FISHING

WHEN SETTLERS FIRST CAME TO AMERICA, they found much of the country covered with forests. Farther to the west, there were miles and miles of prairie land, covered with prairie grasses. The streams were clear, and were teeming with fish.

Most of the rain which fell on the forest and prairie soaked into the soil. Some of it emerged later as clear, cool springs, feeding water to the streams.

In the forested areas, the settlers cut some trees for log houses and other buildings. They cut other trees so that there would be clearings for raising crops. On the prairie, the grassland was plowed to make room for fields of grain.

As more and more people settled the country, more woods and prairie were used for cultivation. Much of the soil was rich in plant nutrients. It raised good crops.

Gradually, there was a big improvement in farming equipment. A farmer could culivate more acres. There was growing demand for the farm products, too, as the villages and cities grew in number and size.

The farmers who cultivated the fields plowed straight furrows, even on hillsides. They noticed that, during heavy rains, some of the plowed soil washed away. It muddied the streams. The farmers didn't worry about it. If they happened to "wear out" a farm, they could move elsewhere and start another one. Or, they could clear some more of the woodland remaining on their farm, or plow some more grassland if they lived on the prairie.

As the population grew, more land was cultivated. Finally most of the farmable land was being used. A person who "wore out" a farm could no longer move to a new farming frontier. More of the topsoil washed off the farms each year. As the rich topsoil washed away, the land raised less food. Many thousands of acres couldn't be cultivated at all, because gulleys had developed.

Much of the topsoil which washed from the fields was carried into the streams. Many mill ponds were filled with silt. Stream beds were silted, too. In many places the food producing gravel riffles were covered; they no longer raised many insects and crayfish for the fish to eat. Deep pools, where the fish hid, were filled, too.

Downstream lakes and reservoirs received much of the silt load. Some became muddy and became poor habitats for game fish. Some became too shallow to support fish life.

A study of the effect of farming on fishing, showed that a valley which once had 150 miles of good trout stream now had only 60 miles of trout stream. Even these were poor trout waters.

Today, siltation is probably our biggest single destroyer of fish habitat.

The early settlers depended heavily on our streams and lakes for their food supply. The fish in these waters were an important source of fresh meat. Now, though, there's plenty of meat. If we want fish, we can buy it at the market. We would still have enough to eat, even if our lakes and streams didn't produce fish. So, why worry about the fishing? There are two good reasons why we should be concerned about the fish production in our waters.

Sport fishing has become a big business. The 25 or 30 million anglers spend more than a billion dollars per year on bait, motors, boats, fishing tackle, transportation, and other fishing costs.

More important still is the value of fishing to our health and well-being. Living has changed since pioneer days. We do less physical work now, but the problem of "keeping up with the Joneses" has become a nerve-wracking matter. We need to relax every now and then. Fishing is a favorite form of relaxation.

Too, the silt which destroys our fishing, is badly needed on the land. Without the good topsoil, farmers can't raise good crops. They can't earn much money. Everyone loses when the topsoil washes into our streams.

America has become great because of its wealth of resources—its soil, water, forests, and minerals. If we destroy these resources we also destroy our strength and our high standard of living.

In counties where the topsoil has been destroyed, many people are hungry. In these lands there isn't any sport fishing. Hungry people fish for food, not for fun.

So, let's keep the soil on the land. The farmers need it; the fish don't want it! END

Joe L. Cobb displays a day's bag of quail and the large rattler that occasioned a few tense moments during the season's final hunt.

THE FINAL HUNT

By JOE L. COBB

OFF AND ON since the opening day, Roy Gnann and I had talked over the possibility of doing a little quail hunting. As is all too often the case however, the press of our respective businesses had prevented us from getting together. It was all the more pleasurable therefore when, at 2:00 p.m. on the final afternoon of the season, Roy and I met at his store in Middleburg with the express purpose of seeing what could be done about ringing down the curtain on the current bird season.

When we took to the field, there was, as usual, the customary "friendly rivalry" between two hunters. I had "Butch," my covey dog and "Lady," a fine young pointer. Friend Roy had a good staunch pointer in addition to "Pete," a young, up and coming bird dog of which he was particularly proud.

During the first couple of hours we found a few coveys, killed some birds on the rise, and downed a few singles. The friendly competition was about "even Steven" in so far as the performance of our respective dogs was concerned.

It was along about 4:30 when we were unable to find "Pete." As we searched for him, I commented to my companion that it would be just about my luck to find him pointing a covey. Anyway, if such proved to be the case, I hoped that at least we would finish off the day by having my dogs back his pointer.

We finally located Pete on a very stylish point at the head of a little ravine, although he was moving up very slowly and carefully, a few steps at a time. Of course we felt that the birds were simply running or feeding ahead of the dogs, and were not too much alarmed by the situation.

Now any fellow's dog has some faults but "Lady" had always been steady so far as backing is concerned. I have never known her to steal another dog's point nor to move in ahead and flush the birds before we could move into position to put them up ourselves.

She came from behind and spotted Pete on point. She did not act in her usual staunch fashion however, for after approaching within ten feet of the other dog, she turned and came back to me. I have never kept a dog that was a "blinker" so my embarrassment over a performance of this sort may be appreciated, particularly in view of the constant bantering and boasting that had been going on between Roy and me. Lady had not only failed to back but also she had failed to take her customary interest in the other dog's point. She had made no attempt to flush the birds but simply was not steady. She would run up to Pete, wheel, and come back to me acting as if she expected to be whipped or scolded for failing to honor the point. The third time she came back to me I was still out of good shooting range of Pete's birds. I scolded Lady without avail. She ran off to the side and worked in a little ahead of the other dog. I held my breath for it appeared certain that, for the first time in her life, she was going to flush birds that another dog had found.

It seemed to me that keeping the dog under control was more important than shooting on the covey rise. As I approached the dog, I broke off a small oak branch to serve as a switch. I stepped a yard or so in front of the dog, intending to give her a light switching on the nose. As I leaned over to administer the punishment, I stepped out with my left foot, and came down within twelve inches of the business end of one of the meanest, largest, and orneriest looking rattlesnakes it has ever been my displeasure to encounter. Fortunately, the snake was not coiled but as I jumped back he went into that customary side swing coiling which usually proceeds the strike.

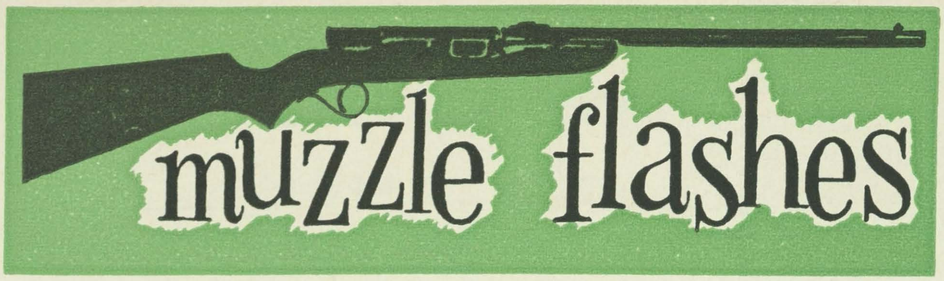
The position of the snake, between Pete and Lady, made it difficult to get a good, killing shot at the rattler without endangering either dog. The gun wavered back and forth as I attempted to draw down on the swaying target.

Adding even more to the tenseness of the situation was Roy's comment, "Joe, what in the world is the matter; are you that shaky? Go ahead and kill that snake before he gets either you or one of the dogs!" From his position, Roy did not have a clear view of the dangerous drama so he did not realize that I was trying to point the gun at the snake's head for a sure kill. I felt there was a possibility that unless I could hit the rattler's head, he might yet strike one of the dogs or me.

Finally the opportunity presented itself and the blast of the 20 gauge ended the dangerous show, just as Butch trotted up to see what was going on. As the snake thrashed his last, I heaved a sigh of relief; this had been the closest call that I have ever had in a good many encounters with rattlesnakes and moccasins, while quail hunting. Many of my friends claim that they have hunted in Florida, Georgia, and many other Southern States, but have never yet seen a rattler; maybe they are luckier than I. During the past several years, I have averaged killing a rattler a season, two of which were encountered under conditions that were far from being nerve soothing.

After dispatching the big rattler, we decided that we had had sufficient quail hunting for the day, and both agreed that it was fitting time to call the season

(Continued on Page 34)



muzzle flashes

By EDMUND McLAURIN

IN THE CATEGORY of repeating shotguns, duck hunters and shooters of fast flying upland game have a high opinion of and expressed preference for autoloading models. Until recently, however, the advocates of the autoloader have had to get along with guns operating on the mechanical working principle of the original John M. Browning patent, featuring a long recoil action embodying movement of both breechblock and barrel.

The transmitted energy of an autoloading shotgun's moving parts, activated by firing a chambered shell, has been responsible for much of the shoulder punishment complained of by some autoloader owners. There has also been widespread criticism of the noisy, metallic clatter that has accompanied the backward and forward movements of breech block and barrel—movements during which the barrel and breechblock, locked together, make a rearward journey in tandem, separate for a moment and then re-unite as locked parts after the breechblock picks up a fresh shell from the magazine and feeds it into the gun's chamber. Also, owners of autoloaders working on the long recoil prinple have had to get along without the desired feature of a full-length, uninterrupted ventilated rib so often seen on the other types of shotguns; the long recoil operating principle of the autoloaders has made such installations impossible.

For these reasons, plus a stopwatch proven opinion that — in trained hands—a pump action can be fired as rapidly as an autoloader for aimed shots, the editor of this section has never particularly liked autoloaders, preferring instead such smooth working trombone actions as found in the Ithaca Model 37, the Winchester model 12, the discontinued Remington Model 31 and its successor, the new "Wingmaster" 870, and the lightweight slide-action catalogued by Sears, Roebuck and Company as their "J. C. Higgins Model 20". In the course of field testing some of the 1955 crop of autoloading shotguns, however, personal opinion has done an about-face. Admittedly, the new autoloaders, whether utilizing a "slip chamber" and inertia weights, the gas-port activated mechanism of the M-1 rifle of World War II, or a system of cushioned springs, are good and overcome many of the bad features of the old-style, long recoil type autoloaders.

The new Winchester Model 50 features a stationary, fixed position barrel, bored from a single bar of select steel, perfectly uniform from breech to muzzle. The barrel does not recoil like models made and marketed under the original Browning patent; the operating principle, based on early experiments by "Carbine" Williams, is entirely different. In the Winchester Model 50 autoloading shotgun the breechblock is activated by a movable chamber that, with the breechblock, moves only about .090 of an inch when the gun is fired, to start the automatic action, but not until the exploding powder has developed full power and velocity behind the shot charge. From this short recoil start, the breechblock gently slides clear back and ejects the empty shell before again starting forward. The transmitted recoil, much of which is absorbed by the operating mechanism and the heavy inertia rod that runs through the wood stock, is delayed in reaching the shooter's shoulder and seems definitely softer in respect to the thrust of the buttplate against shoulder muscles as the gun is fired. Also, with the new style mechanism, you don't need to force your shoulder into the stock to make the action work. You can shoot without being "gun conscious," especially in respect to the disconcerting "double shuffle" that is characteristic of autoloading shotgun actions operating on the original Browning patent, long recoil system.

The Winchester Model 50 has a capacity of three shots—one shell in the chamber and two more in the self-feeding magazine. An interrupted trigger requires a deliberate finger pull for each shot; there is no chance for the new autoloader to "maxim" or go full automatic.

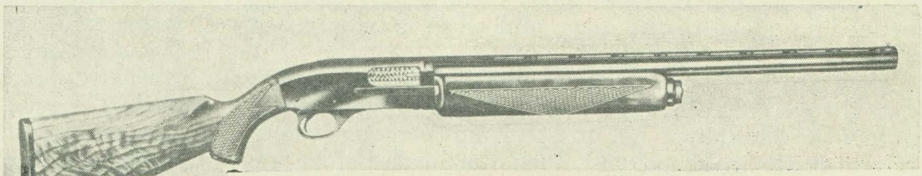
In the 12 gauge size, the Model 50 is available with 30", 28" and 26" barrels; in Field, Trap or Skeet grades; with plain or ventilated rib barrels, and in Full, Modified, Improved Cylinder or Winchester Skeet choke borings. In the 20 gauge size, the new autoloader will be made to the same catalog listings as the 12, except that only 28" and 26" barrel lengths will be available.

Field firing tests have indicated that the new addition to the Winchester line of smoothbores operates best when nearly dry of oil and reasonably free of powder residue. This desirable condition can easily be maintained as the Model 50 is easily taken apart for cleaning, the entire trigger guard assembly lifting out once a takedown pin is removed. The barrel locks and unlocks with only one-quarter turn. Interchangeable barrels, to give the shooter a selection of barrel lengths and choke borings, are available at extra cost, or a selective choke attachment can be factory fitted to a single barrel.

The Winchester Model 50 autoloader weighs about 7¾ pounds; uses 2¾ inch shells of any make. Its buttstock is designed for the average shooter and features a drop at comb of about 1 7/16" and 2½" at heel, and a measured trigger pull length of 13⅞" from buttplate. Listed grades are priced from $120.50 up.

The "J. C. Higgins Model 60" Gas-Operated Shotgun

Designed and made by the High Standard Manufacturing Company for Sears, Roebuck and Company, sole distributors, the new "J. C. Higgins Model 60" is a power piston



A much discussed model of the 1955 crop of autoloading shotguns is the new J. C. Higgins Model 60, made for Sears, Roebuck and Company by the High Standard Manufacturing Co. of autoloading pistol fame. The operating principle utilizes the gas motivated power piston action of the M-1 rifle of World War II, resulting in less barrel whip and transmitted recoil.

autoloading shotgun employing the same gas operation principle as the U. S. Army's M-1 rifle of World War II fame. Immediately after the shot charge has left the barrel, the gas-port, power piston action of the new Sears' product harnesses and utilizes the residual gasses of the fired shell to do all the work of extracting the empty shell, ejecting it, loading of a fresh shell into the chamber and cocking the action for the next shot. Though there is no loss or reduction whatsoever in the generated power behind the shot charge, the felt recoil from firing the Model 60 is noticeably reduced, permitting quick recovery and better gun pointing by the shooter from fast, successive shots. Field tests by this editor proved those claims. Tests also substantiated the mail order firm's claim that the "J. C. Higgins Model 60" is a fast operating shotgun. Some of the shotguns marketed under the Sears' brand name have been objectionably heavy, but, in designing the Model 60, gun weight has evidently been equalized throughout and not concentrated in butt or fore-end. The needed balance for fast shouldering of the gun for fast shots is there! A full, undistorted sighting plane also contributes to fast gun pointing.

The new Winchester Model 50 autoloading shotgun features a non-recoiling barrel. Its breechblock is activated by a "slip chamber" which moves only .090 of an inch when the gun is fired. This reduces the spring force required to close the action and overcomes the feel of a "double shuffle" between the shooter's hand and shoulder. The minute movement of the independent chamber starts into action the unlocking and extracting mechanism with no disruption of aim, and absorption of much of the recoil of firing. Barrels of different lengths and choke borings can be interchanged with ease.

The Sears' gun is of five shot capacity, with available plug to make it legal for use on migratory game, and handles light trap and Skeet loads, heavy field loads and shotgun slugs without adjustment. The interlocked barrel and receiver cannot shoot loose.

A personalized feature is a silver nameplate inlaid flush with the surface of the gun's stock, for engraving with the initials of the gun's owner. This decoration adds considerably to the appearance of the gun.

The Model 60 is made in 12 gauge only, but in three grades and prices. The lightweight standard grade model has a 28" barrel, with shooter's choice of Full, Modified or Improved Cylinder boring, and a total gun weight of 7⅜ pounds. The catalog price may be a little under the $89.95 figure the retail store outlets will charge. This same lightweight model, but with factory installed, full length ventilated rib, will sell for $94.50. The added rib ups total gun weight about four ounces.

The deluxe grade Model 60 features both a full length ventilated rib and installed "Chokemaster" choke control and compensator device. The "Chokemaster" gives the shooter a choice of six positions of choke, from Extra Full to Open Cylinder, by opening and closing the device in much the same manner as one adjusts a nozzle on a garden hose. There are no tubes to change—only the settings of the revolving sleeve at the muzzle end—and you can use the same gun and barrel for everything from deer to quail, plus trap and Skeet. In field firing conducted by this department, the Model 60 gave best rifled shotgun slug accuracy with the choke device on Open and Improved Cylinder readings. Total gun weight is 8 pounds.

All three models have been siliconized and polorized at the factory to protect the new Sears' catalog listing from rust caused by ordinary handling and usage. For shooters whose hands tend to perspire easily, this rust resistant treatment of steel surfaces will especially be appreciated.

Except for the variations in total gun weight, all three grades of the new Model 60 have a 14 inch length of pull, 1⅜" drop at comb, 2¼" drop at heel, a pitch of 2⅛" and an overall length of 47½ inches. A bead front sight is common to all models.

New 12 Gauge Browning Double Autoloader

Designed by Val Browning, son of the late John M., the new, streamlined two shot autoloader has the balance and feel of a 20 gauge. It is available in three barrel lengths, interchanges barrels completely and quickly, and barrels can be had with choice of four choke borings, from Full to Skeet, but only in the 12 gauge size at present.

In the new Browning "Double Automatic," to use the trade name, the unattractive, hump-shoulder receiver outline of the original Browning autoloader has given away to a symmetrical, sleek, curved receiver that seems to line up naturally with the aiming eye when the gun is thrown to shoulder for a quick shot. The re-designed receiver enables a Browning owner to concentrate more on the technique of his aim and firing rather than an unsightly, square-sterned receiver that intersects his line of vision when the original Browning model is fired. The new receiver has a knurled sighting line running full length, an aiming aid.

The long recoil of the old style Browning has been replaced (in the "Double Automatic" model) by one of short recoil and a system of cushioned springs that pillows the backward and forward movement of the barrel, with resulting reduction in felt recoil and attendant mechanical clatter of moving parts.

No shell feeding trouble is experienced with the new Browning because the gun has no shell magazine, only a shell carrier (for the second shot) that is not dependent on a magazine follower spring for its lift. Loading is exceptionally fast and the shell that is cradled in the carrier can be seen through the gun's loading port—a safety factor.

The new Browning is chambered for 2¾ inch shells, but will not accept the 3-inch Magnum loads, though, in the 2¾ shell length, handling light, high velocity and standard Magnum loads without adjustment or difficulty.

The full pistol grip stock is not as attractive in wood grain as it could be on a shotgun of the price class of the Browning, but its dimensions will fit the average shooter. Length of pull is 14¼ inches (short-armed shooters may have to stretch a bit to reach the trigger), and drop at comb is 1⅝ inches; drop at heel is 2½ inches. A checkered pattern adds to the appearance of the stock and an engraved design to that of the curved receiver. Prices vary—from $123 for the

(Continued on Next Page)

(Continued from Preceding Page)

standard model to $151.50 for the deluxe listing.

In conducted field firing tests, this department found that the standard model with plain barrel had a tendency to shoot low. Florida shooters, therefore, are advised to consider the model that offers a raised rib for a sighting plane, for better centering of the shot pattern. The addition will be worth the slight difference in gun cost.

Shooters who object to the Browning's two shell capacity should keep in mind that the fast-shooting autoloaders are already being cut back in firepower by legislation being passed in the interest of wildlife conservation. For shooting of migratory birds, repeaters are already limited to three shell loading and carriers of unplugged five-shot guns are subject to court citation. The new Browning's two shot capacity, therefore, should not be held against the gun's value and usefulness.

The Winchester Model 50, the "J. C. Higgins (Sears, Roebuck) Model 60" and the new Browning "Double Automatic" are representative of the improved designs and operating principles of the 1955 crop of available autoloading shotguns, but only personal inspection and an unhurried session of gun fitting will determine which of the new models will best suit you. Only basic differences and features have been covered in this text, by way of layman understanding of their working principles. Casting of vote for top ranking make and model is an individual matter, based on mechanical inspection, gun fit and, where opportunity exists, by field trial.

END

THE FINAL HUNT

(Continued from Page 31)

to a halt.

The 6 foot long snake that had caused all the excitement carried 16 rattles and a button. It has been claimed that the Lord put everything on earth for a purpose; perhaps—but the only good purpose I have ever known a rattler to serve is for making a pair of shoes and a purse for Mrs. Cobb, my usual hunting partner.

My purpose in relating this snake story is to warn other quail hunters who may, sometime in the future, find their dogs acting queerly, and refusing to point or back properly. Don't discount the possibility that instead of a covey of bobwhites crouching in the cover ahead of the dogs, a "buzz-boy" may be lying in wait.

END.

JUNIOR CONSERVATIONIST

(Continued from Page 5)

tion ceremony of newly elected officers. It is the hope of the Board of Directors that all clubs within the league use this ceremony to install their officers and their new members, this year and the years to follow.

New Board Meeting: Friday. Convened at 7:18 P.M. The new rank system was introduced by the State Executive Secretary. Ranks to be used are: Pledge, Ranger, Forester, Conservationist, and Junior Wildlife Officer.

The pledge would be any young boy or girl wishing to become a member of a club. This probation period would be for three months. During this time the club could determine if the member-to-be would meet the requirements. Being accepted the member would become engaged in the State League point system. After accumulating 10,000 points the next rank would be that of Ranger.

Adding another 20,000 points to the already accumulated 10,000 making 30,000 points the young Ranger attains the next rank — Forester. Next highest rank would be that of conservationist at 45,000 points. All points would be accumulative. Highest rank would be that of Junior Wildlife Officer. Total accumulation for this highest rank would be 100,000 points with other honors to be given.

Second Board Meeting: 8:30 A.M., Saturday morning, July 23. Board of Directors meeting. Second meeting of the newly created board. Ratings of the Top Ten Clubs and the system used to rate these clubs each month was discussed. Points are given for clubs who report, and tell of their meetings and activities. Attendance and amount of publicity either by radio or by press.

Membership cards were signed by the new president and were distributed to the delegates who were present.

The following clubs with paid membership in the League are: Archbishop Curley High School, Miami; Stuart Junior Conservation Club, Leesburg Junior Conservation Club, Ft. Lauderdale Anglers Club for Juniors, Hialeah Everglades Jr. Conservation Club, Orlando Optimist Jr. Conservation Club, Hardee Jr. Conservation Club, Dean Mather Jr. Conservation Club, Ocala, Bay County Girls Jr. Conservation Club, Eustis Jr. Conservation Club, Allapattah Optimist Club, Miami, St. Petersburg Jr. Conservation Wildlife Club.

The board set their second quarterly meeting for next October. Dates to be determined later. Place for the meeting will be Daytona Beach.

END

Members of the Tallahassee Whizzers Junior Conservation Club line up for a photo during a recent outing at Lake Jackson near Tallahassee. Front row, l. to r., Tommy Jernigan, Tommy Sadler, Jim Wadsworth, Gene Slade, Mike Ashford, Charlie Jernigan, Everell Perkins, Bobby Folks. Back row, Wildlife Officer Ross Summers and Jim Wadsworth, Sr., Club Counselor.

FISHING

By CHUCK SCHILLING

IN THESE DAYS, sports fishing is being constantly billed as "big business." The science of Fish Management and Fishery Biology is in the forefront of fishing news. Fishing experts bombard us with treatises on proper technique, and tackle specialists learnedly discuss the mechanical side of our gear. The modern day angler listens with furrowed brow.

While all the above is most necessary, let us not lose sight of sport fishing's primary object. That is, TO HAVE FUN.

Yes, the object of fishing is to have fun—to relax and forget for a while the cares and tensions attendant to our modern way of life. If you have been taking your fishing a little too seriously, let me implore you to look for the lighter side.

PROVE IT:

Not long ago, I was invited on a fishing trip with a friend who is more interested in speedboats and water skiing, at which he is an expert, than he is in angling. As the visiting "fishing expert," I was more or less expected to perform in a manner to justify the reputation.

We started early the next morning while the mist was still loathe to part with the water. My heart sank as I saw that we were to go fishing in a speedboat. This classy job was about 18 feet of gleaming mahogany, varnished decks, chrome trim, and red leather upholstery. The powerful motors roared into life, and we tore across the water, shattering the early morning quiet with our passing.

As we sped along in a welter of white foam, we screamed at each other in a strained conversation. I learned there was a small cove just ahead that was supposed to be a very good spot for early morning bass. The racing boat rounded the point, banked on a steep angle. The cove was dead ahead. We slammed into it and cut the motors at the last moment.

The boat's momentum carried us into the center of the pocket, as the following swell raced ahead of us and heaved the water like a tidal wave in a bathtub. I got shakily to my feet, clutching the rail with one hand and watching the bouncing lily pads with incredulous eyes. My friend, who has a wry sense of humor, leaned back comfortably on the cushions and said, "O.K. This is it. Catch me a fish," meanwhile adjusting the idling speed of the motors to a muted thunder.

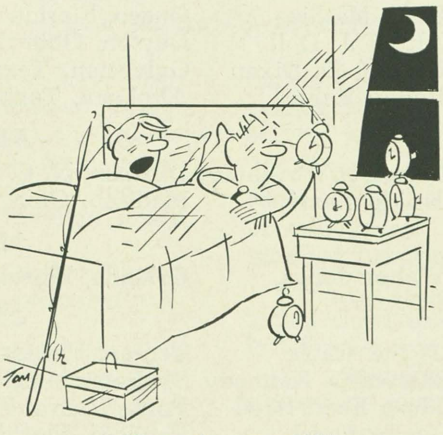
The really funny thing about this episode is that I DID catch a fish after the water quieted down enough to make a cast.

EXPERTS ALL:

One of the most amazing things about sport fishing is the lack of novices in it. Invite one of your friends to a game of golf or tennis, and he will immediately tell you he hasn't played for years and doubts if his game is good enough to be put on public inspection.

Ask another friend to go bowling or to fill in for an evening of bridge or Ping-Pong, and the answer will be similar. "It's been so long since I played"—"Please don't expect too much." Most sports seem to be pursued by people who view their prowess with a modest eye.

But not fishing—certainly not fishing. It is a rare angler indeed who does not consider himself an expert. Even though his last fishing experience was for bullheads 30 years ago, he will resist instruction or advice like a small boy avoids soap. What's more, after demonstrating his ineptness in even the rudiments of the art all day, he will bend your ear half the night with tales of past success and original theory. The fisherman is a stubborn but lovable guy, and I suppose if he had more in common with golfers and tennis players, perhaps sport fishing would not be the No. 1 recreation in America today.



"Go to sleep, stupid!"

RIGHT OR LEFT:

Sports fishing has a condition existing that I do not believe has a parallel in any other sport. The casting reel is strictly an American invention. The first reels were produced in left-hand models. I rather imagine the inventor of the modern, multiplying casting reel was, himself, left-handed and built his first reel to accommodate his own left-handedness.

At any rate, the American manufacturers proceeded to produce millions of left-handed casting reels that were purchased by a fishing public, 90% of whom were right-handed. The left-handed anglers were in clover. They cast with their left hand and reeled with their right, as was originally intended. But the big majority of reel buyers (right-handers) were forced to improvise to use the product. These unlucky casters had to cast with the right hand, then change the rod to their left hand so that their right hand could grasp the reel handles—an altogether unsatisfactory arrangement.

Some few right-handed anglers refused to accept this hand changing routine. A few of these hardy souls spent the time to find one of the few right-handed casting reels that were being manufactured, but most of them learned to cast with their left hand and so joined the happy group of naturally left-handed fishermen.

Now comes the joker—with the advent of spinning reels in both left and right hand models, many right-handers have so conditioned them-

(Continued on Next Page)

(Continued from Preceding Page)

selves by a lifetime of using left-handed casting reels that they refuse to change to right-handed spinning reels now that proper reels are available. What's worse, the many right-handers, who learned to cast with their left hands, are now reluctant to use their proper hand.

It's a cruel world, and habit is a powerful thing. We've come a long way from the willow pole, the No. 8 thread and a bent pin.

WORM TROUBLE:

If right and left hand reel problems leave you confused, think of this: Jason Lucas, another fishing expert, tells of having his trailer parked at a famous northern fishing resort. One day, a stranger knocked at his door and asked angling expert Lucas if he would pass out some free advice about how to keep worms on the hooks.

Lucas assured the man of his interest and promised his cooperation, but he couldn't make heads or tails of just what the actual trouble was. ~~Finally Lucas~~ asked the man to bring some worms ~~and hooks~~ and demonstrate just what it was that was bothering him.

The inquiring fisherman returned with a can of worms and a top water plug complete with three ganged hooks. He had impaled a worm on each of the 9 hook points and offered this gruesome trophy to Lucas, complaining the worms always fell off when he made a cast.

I've tried to get Jason Lucas to tell me just what advice he gave this angler, but to no avail. A trade secret, no doubt.

STRANGER THAN FICTION:

A few years ago, I attended a banquet of the Sportsmen's Club of America, held in Chicago. Club President Joe Godfrey presented a Plaque of Honor to Andy Anderson, famous Texas outdoor writer, in recognition of Anderson's work in bringing disabled veterans back to fishing. In accepting the plaque, Anderson told of a time when he was fishing in the Gulf of Mexico at Houston. He said he heard a story going the rounds of a huge shark that was breaking all tackle and generally playing havoc at one of the local fishing piers. Andy said he felt called upon to try his hand at catching this fish.

Three times he rigged heavy outfits and hooked the monster, and each time the fish broke away. On the fourth try, Andy said he fought the brute for several hours and finally brought him in close to the dock. At the last moment, however, the tip of Andy's rod broke and, in the resultant scramble, Andy dropped his new, waterproof, self-winding, stainless steel wrist watch into the churned up water off the end of the dock.

Andy was disgusted. The fish had beaten his best efforts. His expensive, new wrist watch was gone, and his vacation was over.

The next year, Andy said he went back to Houston really loaded for bear. He hadn't replaced the wrist watch, but he had really splurged on heavy tackle. He found the demon fish was still uncaught and cutting capers with the sports fishing gentry.

On the first try with the new outfit, Andy hooked the shark. From the very first, it seemed the fish realized he had met his match at last. Slowly but surely, the fish tired, and at last was struggling feebly on the surface at the foot of the dock. A well-placed rifle bullet mercifully ended his career of tackle busting. A block and fall was rigged to hoist the prize to the dock.

Andy said he stayed around to see just what the fish would have in his stomach when he was opened up. He said, "You'd never believe what I found."

Some wise guy in the back said, "I know—you found your wrist watch, still running."

"No," Andy said with a grin, "All I found was a pawn ticket. You see, it was a loan shark." END

"I'd love to take you and the kiddies fishing, dear, but that would defeat the whole purpose of it."

fishing citations

Anglers submitting applications for Florida Wildlife Magazine Citations during the first six months of this year reported a good number of sizeable fish. Below is a "cream of the crop" listing of largemouth bass reported.

Fishermen are invited to write in for their fishing citation whenever they land a fish of qualifying size. The minimum weights qualifying for a citation are as follows: Largemouth Bass, 8 pounds; Bluegill (Bream), 1 pound; Shellcracker, 2 pounds; Chain Pickerel (Jack), 3 pounds; Black Crappie (Speckled Perch), 2 pounds; Red Breast, 1½ pounds.

NAME	*TOWN*	*LBS.*	*OZS.*	*SPECIES*	*PLACE*
JANUARY					
Lewis E. Stanley	Jacksonville, Fla.	9	12	bass	Lake Johnson
MSgt. H. M. Meserve	Jacksonville, Fla.	8	4	bass	Levy's Prairie Lake
Cliff Gosney	St. Petersburg, Fla.	10	8	bass	Lake Tarpon
FEBRUARY					
T. L. Bush	Jacksonville, Fla.	9	2	bass	Lake George
Francis Doll	St. Louis, Missouri	10	8	bass	St. Johns River
MARCH					
H. A. Bishop, Jr.	Starke, Florida	10	4	bass	Santa Fe Lake
MSgt. H. W. Meserve	Jacksonville, Fla.	9	1	bass	Levy's Prairie Lake
D. L. Mathis	Oneco, Florida	11	14	bass	Lake County
Alfred J. Doll	Dayton, Ohio	9	6	bass	Lake Yale
Mrs. H. D. Dixon	Galveston, Texas	9	1	bass	Levy's Prairie Lake
Roddy Rehm	Altoloma, Texas	10	1	bass	Levy's Prairie Lake
APRIL					
Margaret Woodhouse	Durham, N. C.	9	8	bass	Lake Crescent
Eriido Saari	Madison, Ohio	9	0	bass	Lake Diane
MAY					
Walter Jones	Orlando, Florida	10	6	bass	Lake Cherokee
JUNE					
J. Sid Cagle	Tampa, Florida	10	0	bass	Lake Tarpon
Melvin G. Kennedy	St. Petersburg, Fla.	8	5	bass	Withlacoochee River
Mary Land Reed	Ponte Vedra, Fla.	9	8	bass	St. Johns River
James Smith	Panacea, Florida	10	0	bass	Otter Lake

FEDERATION NOTES

THE FLORIDA WILDLIFE FEDERATION officials and their chairman on National Affairs, are backing the efforts of Senator Holland and Senator Smathers to protest the Navy's recent action in attempting to take over the Blackwater River State Forest in Northwest Florida. The Navy has asked for the entire 182,000 acre tract, located in Okaloosa and Santa Rosa Counties, for possible future use.

The Game Commission have expended time and money in rebuilding the deer and turkey populations, to say nothing of the 25 million dollar tree nursery the State financed on this acreage.

It is beginning to look as if one of the biggest threats to our wildlife refuges throughout the country is from the armed services of the United States.

Besides the Blackwater River State Forest in our own neck of the woods, the military are looking at other refuges. The Army is about to take over 10,700 acres of the Wichita Mountains National Wildlife Refuge in Oklahoma. This is part of the area where big game species of the Great Plains are maintained. Our greatest Buffalo herd, and other herds of elk, antelope and white-tailed deer roam the hills; and the largest herd of Texas long-horns is maintained here. Here, also, is a large wild turkey population which is the only source of restocking for the entire southwestern states.

The Army also has asked for transfer of the largest part of 660,000 acre Kofa National Wildlife Refuge in Arizona. This is the desert home of rare game such as the Inyo deer, white-wing dove, the pigmy Antelope and the Gilliard's Mountain Sheep. They plan to use this area for practicing with the use of poison gas.

The Air Force for some time have been using part of the Desert Game Range in Nevada for bombing practice. They have already asked for an additional 100,000 acres in the same refuge to scatter their bomb targets.

Alaska has not been left out either. The Army has applied for use of 17,000 acres and 120,000 acres of public domain in two sites in the Gerstle River-Jarvis Creek-Granite Mountains Area. This range is one of Alaska's finest for sheep, grizzly bear, moose, and caribou. The area acquired would be for the proposed use of chemical testing, which could cause stream pollution, as well as destruction of wild game.

Federation members believe that public hearings should be held on any proposals to take over or give away any part of a National Wildlife Refuge.

* * *

The Pasco County Fish and Game Club with the Pasco County Board of County Commissioners are co-operating with the Game and Fresh Water Fish Commission Personnel in the spraying of hyacinths in three additional small lakes located in Pasco County. Lakes sprayed were Ray Pond, Daughtery Pond, and North Greer Pond.

This work, recently started, will bring to eight the number of lakes in Pasco County in which hyacinth control work has been done. All these ponds will be open to the public for fishing. 750 acre Lake Pasadena was the first lake to undergo treatment and is now virtually clear of all hyacinths. Several tanks of fish rescued from drying ponds were placed in Pasadena this summer.

* * *

The Sportsmen's Club of Dade County in Miami are now actively organizing a Junior Sportsmen's Club consisting of boys from 8 to 17 years of age.

A. D. Bailey, long active in conservation work, is again reactivating the skish teams. The Club has a beautiful pool for practice and holding contests.

* * *

New Clubs recently affiliated with the Florida Wildlife Federation include, EVERGLADES ARCHERS of Miami, with Mrs. Roberta Kirmes as Secretary; PENSACOLA BOWMAN of Pensacola, with Mrs. Miriam Villenewne as Secretary; JACKSON COUNTY SPORTSMEN'S ASSOCIATION, with Mrs. Francis L. McCawley as Secretary-Treasurer. END

FISH OR FLOOD?

FROM WYOMING WILDLIFE

SEVERAL YEARS AGO such a question may have been academic. Today, with human population rapidly increasing, with more and more persons turning to fishing, with more and more waters being impounded, rechannelled or polluted, the question is not academic.

Today the problem of flood control involves many other questions:

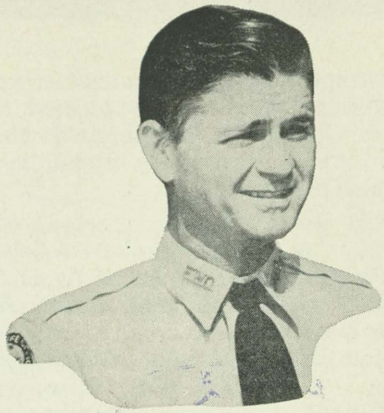
Do actual floods occur? If so, is there a flood-threat to life or property? In other words, is a proposed project actually necessary?

Is the project within the scope of reason, or does it unnecessarily destroy miles of good fishing stream? In a straightened, dozed, dredged and rip-rapped channel, what happens to the spawning areas? What happens to fish food? What happens to fish cover and resting places? What are the effects of fluctuating reservoir waters on fish life?

What's the cash value to be derived from the presence of construction crews in a community for one or two years? What's the value of the presence of satisfied fishermen through the years ahead?

We must face the question squarely. If there is an actual flood threat to life or property, by all means let's have necessary flood control work. But let's preserve every inch of fishing stream we possibly can; it's worth cash today—it will be worth even more tomorrow. END

MEET YOUR COMMISSION



WILLARD DONALD BEVILLE
Central Florida Region

Area Supervisor Willard Donald Beville began his job with the Commission on December 25, 1948. On July 1, 1954, he became Supervisor of Area 11, Central Region. At the age of 33, Willard has a little over 6½ years of service with the Game and Fresh Water Fish Commission.

Willard and Mrs. Beville, the former Cora Lee Riggs, have three children: Sybil, age 9; Eddie, age 5; and Lois, age 2.

Willard attended grammar school in Lecanto and high school in Crystal River. His experience as a range rider gave him a thorough knowledge of the country in which he now works for the state.

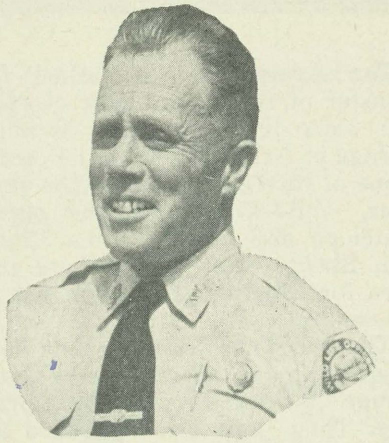
☆ ☆ ☆

ERNEST WILLIAMS
Everglades Region

Area Supervisor Ernest Williams has been with the Commission since October 15, 1950. He became Area Supervisor of Collier and Hendry Counties in 1954.

Ernest and Mrs. Williams, the former Georganna Skinner, live in Clewiston. The couple have two boys, Hilton, 28, and Ernest, Jr., 16, and two girls, Margie Nell, 17, and Patricia, 4.

Before becoming an employee of the Game and Fresh Water Fish Commission, Ernest served as a Machinist Foreman for 11 years.



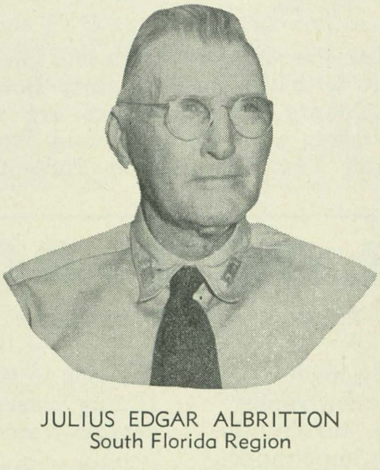
WALTER LARKINS
Northwest Florida Region

Walter Larkins, Area Supervisor of Northwest Florida's 3rd Enforcement District, was first employed by the Game and Fresh Water Fish Commission in May, 1936. He worked with the Commission until February 15, 1941. After an absence of several years he was again employed by the Commission in September, 1946.

A native of Liberty County, Walter and Mrs. Larkin, the former Nell Miller, live in Bristol. The couple have one daughter, Louise, age 17.

Prior to his employment by the Commission, Walter was self employed in the region of the Apalachicola National Forest. He has been a hunting and fishing enthusiast all his life.

☆ ☆ ☆

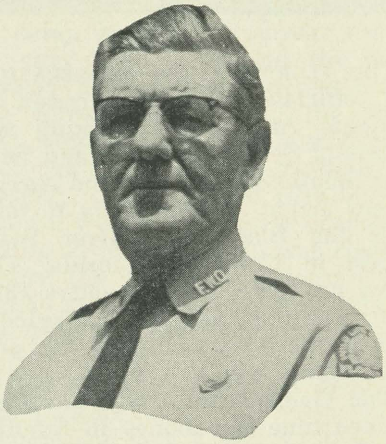


JULIUS EDGAR ALBRITTON
South Florida Region

Julius Edgar Albritton, Area Supervisor for DeSoto, Glades, Highlands, and Hardee Counties, has been an employee of the Game and Fresh Water Fish Commission for the past 10 years.

Ed has been in law enforcement work for 40 years. His experience includes employment as Chief of Police of Ft. Myers from 1920 to 1923, Sheriff of Lee County from 1923 to 1925, and Sheriff of DeSoto County from 1937 until 1945.

Mrs. Albritton is the former Ora Hull. The couple make their home in Arcadia.



SAM C. COLLIER
Northeast Region

Sam C. Collier was born in Moultrie, Georgia, but moved to St. Augustine, Florida, in 1925.

Sam began his employment with the Commission on August 1, 1938, when he was hired as a Wildlife Officer. He became Assistant Chief in 1941 in which capacity he served until his appointment as Area Supervisor in November, 1951. Mrs. Collier is the former Ruth Nettles.

Sam served as Deputy under his father who was Sheriff of Colquitt County, Georgia. Sam's father was, at 82, the oldest active enforcement officer in the U. S.

The Counties of St. Johns, Duval, and Nassau make up Sam's district.

WATERFOWL MANAGEMENT

(Continued from Page 10)

crop of seeds. If the planted portions are reflooded during the fall, they provide excellent waterfowl feeding grounds.

If water level manipulation is not possible, establishment of certain aquatic plants may offer worthwhile management possibilities. Admittedly, this activity is somewhat restricted. The growth of aquatic plants is determined by such factors as acidity, alkalinity, salinity, and hardness of the water, and by other factors such as the nature of the bottom soil, water depth, and current.

Valuable waterfowl foods which occur in Florida's salt water marshes include widgeon grass and saltmarsh bulrush. Shoal grass, manateegrass, and turtlegrass are also utilized by waterfowl.

In the fresh waters, food plants include watershield, banana waterlily, pondweeds, wild celery, southern naiad, beakrush, duckweed and coontail. Even though desirable aquatic plants may be established, water hyacinths, yellow water lilies, water lettuce, sawgrass, and other pest plants may soon crowd them out. Research into the control of undesirable aquatic plants is necessary if this problem is to be combatted with any degree of success.

To gain further information on the utilization of various plants, waterfowl gizzards are collected from hunters during the season and the contents are identified as to quantities of the various components of the contents.

Each year some 20,000 waterfowl hunters take to the field in Florida. The average annual kill of ducks in the state is roughly 200,000 birds. The Game and Fresh Water Fish Commission is investing a considerable amount of time and effort to overcome the lack of reliable information now available regarding the great waterfowl concentrations which winter in Florida. Progress is being made but we still have a long way to go.

Hosting as it does from ⅓ to ½ of the Atlantic flyway's waterfowl population and a not insignificant segment of birds from the Mississippi flyway, Florida's progress in this important work extends far beyond the boundaries of the state. We have a great responsibility not only to Florida nimrods but also to thousands of hunters in other states to the north. The Sunshine State is an important link in the waterfowl management chain in the eastern half of the country. In regards to the webfooted clan, one might say "As Florida goes, so goes the Atlantic flyway." END

PONCHO — MAID

(Continued from Page 29)

ground-cloth or beach blanket. There's no sand, either, clogging the surface of it for weeks afterward.

For walk-in hunting trips, the poncho is a natural—that's what it was designed for. Persons packing hunting and camping gear on their backs can quickly don the poncho in a downpour, allowing its folds to cover pack, weapons and all.

The poncho can also serve as an emergency shelter for the hunter or fisherman. One, suspended from two poles, makes a small lean-to. Two of them, hung over a ridge pole, make an open-ended tent.

Deer-hunting is another department where the poncho shines and puts its best foot forward.

Sitting on a deer-stand all day long is a miserable thing at best, but add a drizzling rain—and brother, you have sheer tragedy!

With the conventional raincoat, the rainwater puddles down the sleeves and wets the hands, converting cigarettes into sodden masses and drenching that prized shotgun or rifle—and perhaps ammunition box or camp-stool.

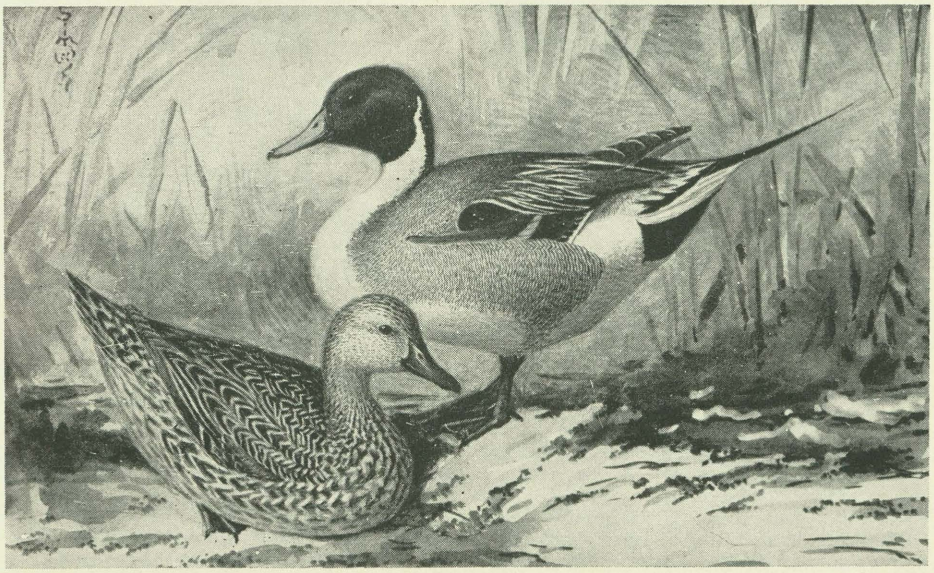
Not so with our smart poncho-equipped hunter. He buttons up the neck-vent, using snaps provided for that purpose. Then he sits down on the stool or ammo box, holding the rifle or shotgun, muzzle-up, between his knees and drapes the poncho over the weapon's muzzle, leaving the front open for vision and allowing its folds to slope down on all sides of him, forming a one-man teepee. The water slides down the sides of the tiny tent, leaving hands free and dry, protecting him and all of his gear.

The poncho is carried by folding it into a one-foot-by-two-feet rectangle and carrying it hooked over a belt, hanging down the hunter's posterior.

Quail hunters afoot—two men and a dog caught in the rain—can all find refuge under the same poncho.

All in all, there's only one limitation to variety of ways in which the poncho can be used—the hunter's or the fisherman's imagination!

END



Pintails breed throughout most of northwestern United States, western Canada, and Alaska. It appears that the Pintails found in Florida come from the eastern part of their principal breeding range.

A NEW DAWN
OF IDEAS
FOR LIVING

FLORIDA SPEAKS & Sunrise

SOUTHERN
STYLE,
that is . . .

SUNRISE is a new kind of magazine, dedicated to good, gracious living, specializing in Florida and the Deep South. But, no matter where you live, this magazine will entertain you, give you ideas for your own homes and gardens, foods, indoor-outdoor living and vacation fun. SUNRISE is a different kind of magazine, and you will enjoy every monthly issue—that we fully guarantee on a money-back basis. Fill in the coupon today.

Florida Speaks & SUNRISE
1424 Fourth Street South
St. Petersburg, Florida

Please enter my subscription to SUNRISE Magazine.

☐ 2 years $4.00 ☐ 1 year $2.50

☐ Remittance enclosed ☐ Bill me

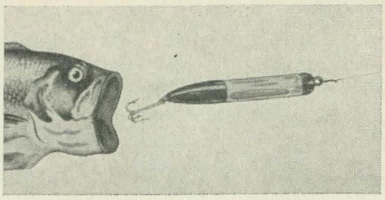
NAME ______________________

ADDRESS ______________________

CITY______________ STATE______

W 1-55

FLORIDA WILDLIFE FIELD TESTS AND TELLS



STAND in the middle of the fishing tackle department of a well-stocked sporting goods store and eye and mentally compare the many different fishing lures displayed in show cases and on wall racks and you will probably reach the conclusion that just about every possible type, style, color and action in a fishing lure has tangible representation.

But, surprisingly, every once in awhile some serious, enterprising angler—usually a so-called born experimenter — develops a new lure that is different from all others and that really catches fish.

Such is the Mercury Worm, a ¼ ounce clear and hollow tenite butyrate plastic lure, housing a globule of restless, flashing mercury suggestive of an unhappily imprisoned worm. The new lure is the clever invention of one Ken Clapp, head of the K-L Company, Angola, Indiana. In developing the Mercury Worm, Clapp experimented over a twelve year period and made and tested more than 150 different models before convinced that he had the very best possible design and action.

The lure, which casts like a bullet, features a red head and red tail, with one treble hook gang in the latter section. When cast and retrieved the blob of imprisoned mercury humps itself around inside the clear section like something alive inside a bubble, and the constantly shifting weight of the mercury causes the lure to alternately wiggle, dive and dart on the retrieve. When the retrieve is halted momentarily the Mercury Worm dives straight down, head first and wig-wags all the time. Although the new lure is a sinking, underwater worker, essentially, it can also be made to perform as a surface bait if given a very fast retrieve, or if trolled. Performance, with a fast retrieve, or trolling action, is not fully on the surface but usually only 6 to 8 inches below it—a good fishing depth for surface-feeding fish.

Field tested in Florida waters by more than a dozen cooperating experts at various points, the Mercury Worm proved to be a good bass-catcher — the purpose for which it was developed—throughout the state. Top weight catch was an 8½ largemouth, made on a regulation bait casting outfit. Second best was a 7 lb., 5 ounce specimen of the same species, taken with spinning rod and reel under almost exactly opposite fishing conditions. In salt water, the bait took many trout, small snook and redfish, but failed to hold large snook and tarpon that struck it savagely. Failure to hold large saltwater fish should not be charged against a lure primarily developed and constructed for freshwater fishing; to the credit of the Mercury Worm is the fact that, evidently, large snook and tarpon cannot resist striking it. (On the basis of the Florida field testing, the manufacturer plans to produce a stronger model with heavier treble hooks, which should make the bait a most effective saltwater bait and especially as a kingfish troller.)

Being streamlined, the present Mercury Worm casts—even against a strong wind—with a flat trajectory. By unscrewing the single set of treble hooks from the tail section, the novel lure can be used for practice casting, or Skish, in the backyard.

Currently, the Mercury Worm is available only in red, but if you prefer, as many Florida fishermen do, a lure that combines the popular "silver flash" with yellow, red and white or aluminum, it is a simple matter to dip the tail or head sections to desired depth in colored lacquer.

If your local tackle dealer does not yet have the Mercury Worm in stock, you can order it direct. Price is $1.39 in stores; $1.45, postpaid, when you order direct.

A new portable cook stove; a camp and all purpose lantern, and a multiple use blowtorch, all utilizing the desirable cleanliness, high heat and convenience of LP, or propane, gas have recently been announced by the Otto Bernz Company, Inc., 280 Lyell Avenue, Rochester, New York. Entirely different in basic operating principle, the new Bernz-O-Matic units should not be mentally catalogued with ordinary gasoline burning stoves, lanterns and torches. Comparison will show marked differences.

In old style outdoor stoves, lanterns and utility torches, gasoline fuel is utilized on a working principle of stored liquid fuel, pressure pump, needle valve and a fine jet of fuel mist. In the new Bernz-O-Matic units, the operating (propane) fuel, packed into a replaceable cylinder by the manufacturer, is vaporized and maintained under constant pressure within a small, vapor area of the fuel tank itself. Opening of the discharge valve on any of the three Bernz-O-Matic units instantly releases a pressurized vapor of fuel, direct from the storage tank. There is no pre-pumping preparation by the user, nor is there any needle valve to give trouble.

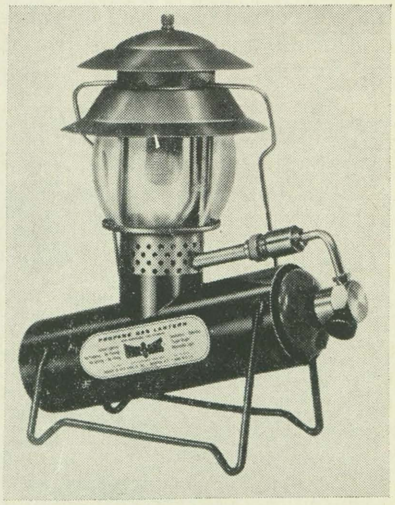
Liquefied petroleum fuel, or LP or propane gas in everyday trade language, is a by-product of the refining process of crude oil. For trade use, the fuel is manufactured under many pounds of pressure, which condenses it into a pressurized liquid by exerted and maintained pressure. When some of this pressure is released, the compressed, liquid-form fuel vaporizes. Therefore, in the Bernz-O-Matic fuel tanks, the manufacturer has provided vapor space between the cylinder's discharge valve and the liquefied fuel. This space is constantly filled with a certain quantity of vapor-form fuel. Exerted interior tank pressure varies according to outside atmospheric conditions, averaging 120 lbs. on an average Florida day, with a possible tank pressure drop of as much as 60 lbs. between high and low temperature extremes in Florida weather. On the other hand, very little practical working pressure is required to operate the new Bernz appliances and they will work on their propane fuel even in a below zero climate. The necessary operating pressure—estimated by FWFT&T! as being under 10 pounds—remains constant at a given temperature for an almost empty tank as one almost full. However, despite low operating pressure, the fuel cylinders bear Interstate Commerce Commission certification of 250-rated safety pressure and also feature a pressure relief valve. A full tank weighs 2 lbs., 2 ounces. Extra cylinders, filled and sealed, are $1.95.

In BTU heat unit figures, the LP, or propane, fuel averages about 91,735 BTU's per gallon or 21,786 BTU's per pound. In practical application, the BTU output stored within each Bernz fuel cylinder is sufficient to prepare twenty meals of average cooking time, at a speed that will provide—to take a typical example—about eight cups of coffee in less than eight minutes.

Aside from efficient utilization of economical, odorless, smokeless and sootless fuel, the new Bernz-O-Matic units have been given practical designing and construction.

In the case of the camp stove, the strong metal cooking grid folds up to make a cool, clean and comfortable carrying handle. No metal case is needed either for carrying or storage.

One of the first noticed features of both the stove and lantern is the sturdy base used on each. Like a coffee pot that is broader at base than at top, the Bernz-O-Matic stove and lantern are not easily upset. You can set up either in a boat while out fishing, in the station wagon while traveling, on the camp lodge's dining room table—or anywhere else, for that matter.



With the lantern, you just turn on the fuel flow valve and light up. The resulting bright light is reflected over a wide area, is very pleasant to read by and most helpful in doing nighttime chores around camp or at home. Like the stove, the lantern burns noiselessly, without smoke, soot or odor, and one fuel cylinder will give a week's service, based on average nighttime use. This simple and practical lantern weighs only 7½ pounds, complete. Fuel cylinders are changed as easily as one can change a light bulb in the home.

The Bernz-O-Matic blowtorch burns as hot as 2100 degrees F., and one fuel cylinder will give from fifteen to twenty hours service. Flame spreader and soldering attachments allow you to do many odd jobs quickly and easily. The torch is ideal for burning off paint, laying asphalt tile, installing copper pipe connections and the close work frequently encountered in boat repair and maintenance. The unit bears Underwriters' Laboratory approval.

The new Bernz-O-Matic stove, lantern and blowtorch each cost less than ten dollars, complete. The stove is $8.95, complete; the lantern is listed at $9.95, ready to light, and the torch is packaged to retail for $6.95, complete with cylinder and burner. Many Florida hardware and sporting goods stores now have the Bernz-O-Matic units in stock. If they are not found locally, write the manufacturer direct.

IN the presentation of FWFT&T! during the past year every effort has been made to make the section more than just an outdoor equipment guide. Reports of products field tested under Florida conditions have contained information purposely presented with the idea of helping FLORIDA WILDLIFE'S consumer-readers get full value and enjoyment from equipment marketed primarily for sporting use. Appreciative readers have written in expressing satisfaction with some of the timely fishing, hunting and camping tips outlined in the monthly texts.

However, the editor of FWFT&T! is interested in further serving readers by scheduling for early field testing specific products, or groups thereof, of which Florida use is contemplated. To get such ideas; to learn just how helpful the research data reported by FWFT&T! has been to the average Florida sportsman, and to give opportunity for personal expression, pro or con, the editor is offering a comprehensive "Sportsman's Kit" for the best letter received on the section as the reader finds it.

This prize package will contain the following outdoor equipment items, most of which have been field tested and reviewed in the section during the past year:

G-F Spinner & Leader Combinations
Lucky Seven Leaders
Squacky Squirrel Call
Shell-O-Matic .22 cal. Cartridge Dispenser
New Trenton Small Game Figure Targets
Shotgun Shooting Textbook
Sheath Rust Preventative
Perma Gun Blue Chemical
McMahon Fishing Swivels
Scotch Plastic Tape (outdoor grade)
Auburn Fish Hooks
Coralize Polishing Compound
Marezine Sea Sickness Preventative
South Bend Bait Spinners
Getzem Fish Bait Scents
Karen-Lynn #AGH-200 Wall Style Gun Holder and a generous assortment of fishing lures, representing the
Porter Sea Hawk and Pop Stop
Diamond Jim
Flowering Floreo
Clarkspoon
Met-L-Fly
K&M Jet
Chase Dilly
Chase Spin Dilly
South Bend Nip-I-Diddee
G-K Special Bass Bug
Manning Tasty Shrimp
Mercury Worm Lure
South Bend Itsaduzy
Creme Artificial Worms
Plug-O-Fly Lures

(Individual items are brand new and unused.)

All letters must be postmarked before midnight of September 30, 1955; none will be acknowledged. The editor of FWFT&T! will have three impartial judges first review all entries and select the winning letter. He will then read all mailings for reader opinion, with the idea of making future FWFT&T! presentations of increased interest and value to readers.

Address your letter of opinion direct to Editor, Florida Wildlife Field Tests & Tells!, 4921 First Avenue, North, St. Petersburg, Florida.

CHECK THAT OUTBOARD

(Continued from Page 23)

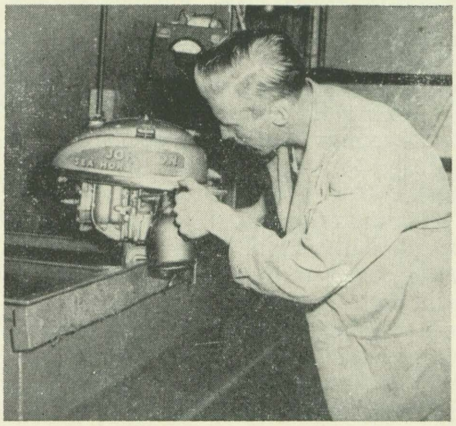
sulator nose and badly worn electrodes. He says that, normally, colder plugs should be used to cure this condition.

(When installing new plugs, always use new outside gaskets, carefully seated on a clean cylinder head surface. Vogel advises screwing spark plugs into cylinders finger-tight, then to tighten an additional ½ to ¾ turn with proper size socket wrench.)

Rust on interior surfaces of spark plugs indicates the motor has been absorbing water from either leaking gaskets or by-passing of seals. Possible wear of rods and bearings may have resulted from this condition if of long standing.

With the spark plugs out of their sockets, determine the condition of connecting rods. Insert a screwdriver in the spark plug hole, up against the head of each piston, and turn the flywheel by hand until the piston comes all the way around and starts back. At the stage, apply pressure with the screwdriver to the head of the piston. Any felt movement indicates a loose piston-rod, a condition probably due to excessive wear brought about by lack of proper lubrication.

Another expensive component part of an outboard motor is the magneto. When tested, it should give a strong blue spark that fairly crackles as it leaps across the points of electrical contact. A weak spark hints of future repair bills, and no spark at all means that you're going to have to foot the expense of a magneto overhaul job before the motor will function properly.



If you can't check your contemplated used motor purchase yourself, ask for privilege of inspection by a capable mechanic, or buy your used motor from a dealer of good reputation, with the extent of the guarantee understood by both buyer and seller.

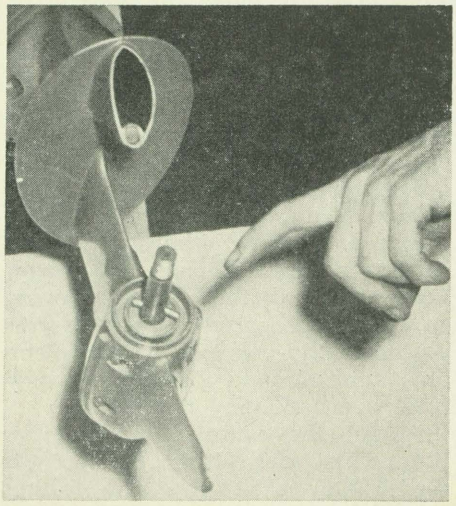
Testing a magneto is simple: After removing the spark plugs, ground one ignition wire against a metal part, holding the other lead from ⅛" to ¼" from the metal, at the same time turning the flywheel by hand or, in older models, with a pointed instrument inserted in the starting rope slot. The resulting spark will reflect the condition of the magneto.

Remember that most outboards have a small felt washer in the magneto and that, for best motor operation, this lubrication reservoir should be given a couple of drops of oil each season.

If the seller has let you make the tests already described, he won't object to your looking into the condition of the gears, the water lines, or the extent of such corrosion as may be indicated.

Rotating the propeller will show whether or not there is excessive wear, and consequently too much play, in the gear mechanism. Even in a good motor, there will be some play, but if the play in the gears is more than normal, watch out. Exist-

(Continued on Next Page)

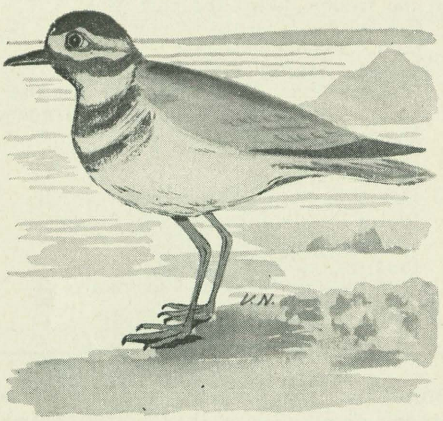


After examining the propeller for minute cracks or warped blades, remove it and examine the shaft for both signs of grease leakage and wear. While about it, disassemble the lower unit and examine the gears, water lines and extent of such corrosion as may be indicated.

FLORIDA Birdlife

KILLDEER

Charadrius vociferus vociferus



PRIME CANDIDATE for the title of the most widely known bird in the country is the Killdeer, or Killdee as the species is commonly called. Eminently appropriate, the scientific name describes the self-advertising characteristic which has made the Killdeer known to every sportsman, bird watcher, farmer, or other person who chanced to be in hearing range of the avian loudmouth. The Latin name *Charadrius* means a plover; *vociferus,* noisy.

The Killdeer is a medium sized shore bird, measuring from 9 to 11 inches in length with a wing-spread of from 19 to 21 inches. The two black bands on the neck and breast stand out boldly against the white underparts. In flight, the bright cinnamon colored upper tail-coverts are conspicuous.

The breeding range of the Killdeer covers a large portion of the continent, reaching from the central portion of British Columbia and northern Ontario south to the Bahamas, Florida, central Mexico, and southern Lower California. The bird winters as far north as southern British Columbia, Colorado, Missouri, New Jersey, and western New York southerly to Bermuda, the West Indies, northern Venezuela, and northwestern Peru.

In Florida, the Killdeer is present throughout the year but its numbers are greatly increased during the winter by the arrival of migrants from the north.

The Killdeer is a ground nester, the 3 or 4 eggs are deposited in a shallow ground depression which is sometimes rather sparsely lined with grass. The rather sharply pointed eggs are buffy white with spots and blotches of brown. The nesting Killdeer is an accomplished practitioneer of the "injured bird" act, leading enemies away from her nest and young by a convincing display of feigned injury.

By nature a gregarious bird, the Killdeers congregate in considerable numbers during the winter months. They are active at night; frequently the characteristic *kill-dee-dee* notes are heard after dark. END

(Continued from Preceding Page)

ing play can be felt, the gear teeth clicking when the propeller or shaft is turned back and forth.

Examine the point where the propeller shaft enters the gear case for signs of grease leakage. Again, movement of the shaft up and down will serve to show the extent of wear at this vital point. In the operation of an outboard motor it is highly important that the gear case be kept properly filled with a good grade, non-emulsifying grease, the lubrication of gears, bushings and bearings being dependent on this attention. Removal of the lower grease plug will show whether or not the motor was drained prior to storage. Long neglect on the part of the owner will be indicated by rusting and pitting of the bearings. If the lower unit is not in good condition, a complete overhaul may be required.

As for the water lines, examine the points where they connect, to see if they are tight. The tubing should be free of corrosion and not show evidence of wear or collapse. Be sure to make this check if the motor has been used in salt water.

When you buy from a dealer who has a reputation to maintain, you don't have to make these tests, it being merely necessary to get a definite commitment in respect to any guarantee that covers your purchase.

On the other hand, you don't want to pass up a real bargain in a suitable, used outboard motor offered through newspaper classified ads or other general sources. The described tests will not guarantee you a perfect motor, but at least you won't have to foot heavy repair bills, besides the initial cost, to enjoy your purchase. Knowing what to look for can save you both money and trouble. END

STRIPED SKUNK

(Continued from Page 6)

The striped skunk, on account of its protective odor, has few natural enemies. Wildcats and foxes have been known to tackle skunks, but probably do so rarely. Great horned owls frequently eat skunks, and are not discouraged by the aroma. Many horned owls smell "skunky," having been drenched with the musk. Automobiles take a very heavy toll of the striped skunk, and at some times of year many of these animals are seen dead on the highways in Florida and other states.

The striped skunk gives birth to four or five young, occasionally six or seven, in the winter or early spring. The babies are hairless, blind, and helpless when first born. They remain in the den for six or seven weeks, and then take to following their mother through the woods. The little ones are cute and kitten-like, but they are "loaded" just like the mother, and should not be molested.

In Florida the striped skunk inhabits many kinds of country: overgrown fields, abandoned farm lands, scrub, hammocks, pine flatwoods, and the dry stands of turkey-oak and longleaf pine. Frequently it spends the day in a burrow dug by the gopher tortoise, and prowls mostly by night.

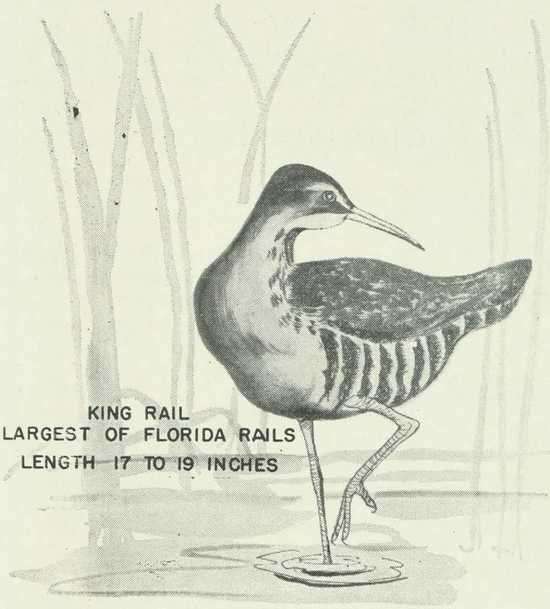
The thick, glossy fur of the skunk is prized commercially, and many thousands of these animals are trapped each year for their pelt.

END

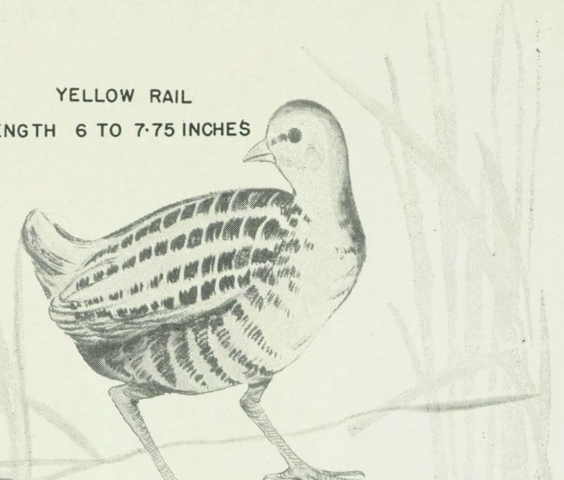
HUNTERS NOTE

Florida's 1955-56 hunting season opens on September 10 when the marsh hen becomes legal game. See detailed announcement on page 3.

FLORIDA WILDLIFE'S SCRAPBOOK

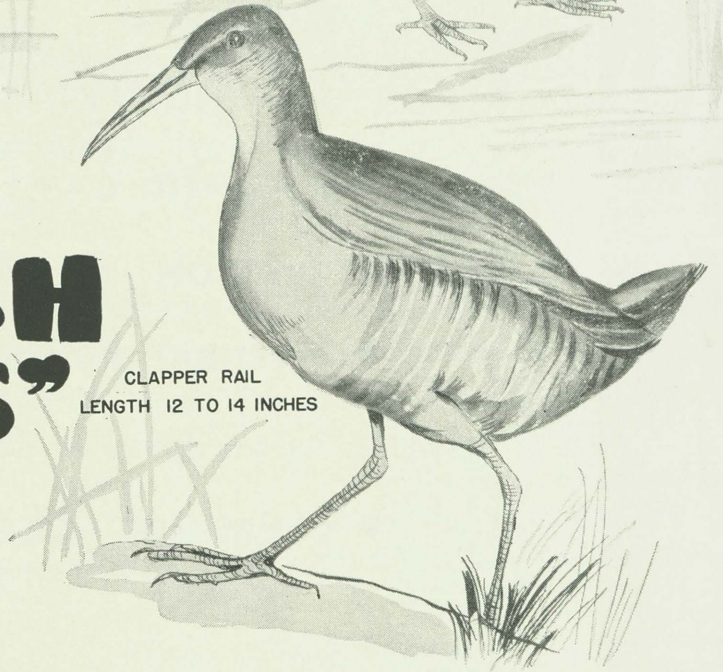


KING RAIL
LARGEST OF FLORIDA RAILS
LENGTH 17 TO 19 INCHES

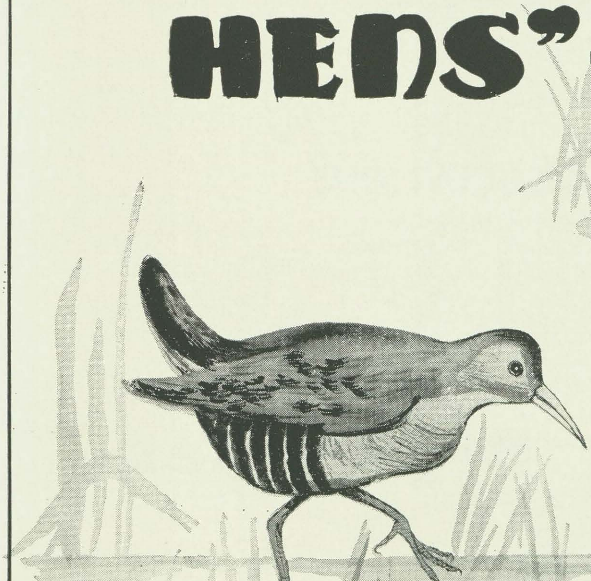


YELLOW RAIL
LENGTH 6 TO 7·75 INCHES

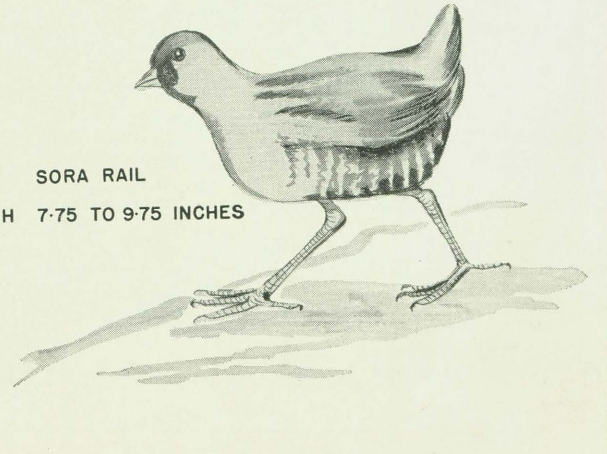
"MARSH HENS"



CLAPPER RAIL
LENGTH 12 TO 14 INCHES



VIRGINIA RAIL
LENGTH 8·5 TO 10·5 INCHES



SORA RAIL
LENGTH 7·75 TO 9·75 INCHES

SUBSCRIBE NOW

Florida Wildlife

The Florida Magazine for ALL Sportsmen

CONTAINING

FEATURES, STORIES, AND DEPARTMENTS

about

- **HUNTING AND FISHING**
    - **FISH AND GAME LAWS**
- **CONSERVATION**
    - **NATURAL RESOURCES**
- **GAME COMMISSION NEWS**
    - **CLUBS AND ASSOCIATIONS**

FLORIDA WILDLIFE
Tallahassee, Florida

Enter or extend my subscription for ________ year(s) for FLORIDA WILDLIFE at $2.00 per year.

☐ Check; ☐ Cash; ☐ Money Order herewith.

Mailing Address:

Name ________________________________

Street No. ________________________________

City________________________ State____________

Signed ________________________________

12

Big Issues

of Florida Wildlife

for only $2.00

TWO YEARS, 24 ISSUES, $3.75
THREE YEARS, 36 ISSUES, $5.25